SCHEDULE OF RATES - 2022
FOR
BUILDINGS, ROADS &
PUBLIC HEALTH INSTALLATIONS

GOVERNMENT OF PAKISTAN
PAKISTAN PUBLIC WORKS DEPARTMENT

PREFACE

This edition of "Pakistan PWD Schedule of Rates - 2022" is in revision of the rates of its 2012 edition. In this addition introduction of new materials, advanced practices & modern technologies has lead to huge transformation in construction industry. Besides, due to abnormal increase in prices of fuel & dollar rates, the market has experienced huge price hike in the recent past. Hence revision of Pak PWD Schedule of rates 2012 became inevitable.

This edition of Pak PWD Schedule of Rates 2022 is in revision of 2012 edition. Obsolete items have been deleted & latest construction materials have been added as per current market rates & trends.

Best efforts have been made to make this edition "Pakistan PWD Schedule of Rates 2022" comprehensive & streamlined with prevailing market practices. However, if any error or omission observed; it may be conveyed. It is anticipated that this schedule will address all the shortcomings experienced in the previous edition Pak PWD schedule of rates 2012 will prove as a much enhanced & upto date document for planning & execution of quality works.

DIRECTOR GENERAL
PAKISTAN P.W.D.

ABBREVIATIONS

The following abbreviations have been employed in this book :-

Imperial System		System International	
Running foot	Rft	Millimetre	mm
Running yard	Ryd	Centimetre	cm
Square foot	Sft	Running Metre	Ru.m
Cubic foot	Cft	Square Metre	Sq.m
Square yard	Syd	Cubic Metre	Cu.m
Pound	lb.	Kilo Gramme	Kg.
Ounce	OZ	Kilometre	K.M.
Pounds per Square inch	psi	Newton	N
Inch	"		
Imperial Gallon	Im.gl.		
Gross	Grs.		
Maund	Mnd.		
	Dozen	Doz	
	Hundred	Hund.	
	Sheet	Sht.	

APPROVED MANUFACTURERS

APPROVED MANUFACTURERS LIST

A. CIVIL WORKS

	Material / Articles	Name of Manufacturers / Brands
1	Steel	Fazal, PECO, Ittehad, -Metropolitan, Nawab, Razzaq, Mughal, Amberley or equivalent.
2	Aluminum Works (Aluminum doors & windows)	Alcop, Thermec,Eng: Co, Alhali Aluminum Co (Pvt) Ltd, Krudson, Lucky, Prime, Chawala or equivalent.
3	Paints / Distemper	Robbialac Berger. ICI, (Dulux, Paintex), Master, Brighto or equivalent.
4	Locks / Hardware	Alpha,Babar or equivalent.
5	Glass	Khawaja, Nowshera Prince and Ghani or equivalent.

B. WATER AUPPLY / SANITARY FITTINGS

	Material / Articles	Name of Manufacturers / Brands
1	Bib Cock, Mixer, Stop Cock etc (Metal / Plastic)	I.C.L Forte, Manga, master, Faisal, Sonex and Super Asia or equivalent.
2	W.C (Indian)	I.C.L Forte, Karam, Cera, Porta,Master and 3 Star or equivalent.
3	W.C.English (with seat cover)	I.C.L Forte, Karam, Cera, Porta,Master and 3 Star or equivalent.
4	Flushing Cisterns (Plastic)	Master, Golden, Baig, Super Asia or equivalent.
5	Flushing Cisterns (Earthenware)	Karam Cera,ICL,Forte and Porta or equivalent.
6	Bottle trap	Master, Sonex, Asia, Faisal, Super Asia or equivalent.
7	G.I.Pipe	IIL (Medium) Victory (Medium), Jamal (Medium) or equivalent.
8	PVC /uPVC ,PPRC, PE pipe	Shavyl, Galco, Beta, Master, Popular, Master and Turk Plast or equivalent.
9	Cast iron spun pipe	C.I.Engineering /corp: Teepu, Alpine, NPC and CME or equivalent..
10	Gate Valve	Anwer, Asia and Kit or equivalent.
11	Stainless sinks	Atlas, Super Asia and Rashid or equivalent.
12	Ceramic tiles	Master,Shabbir, Stile, Forte, National and Time tiles or equivalent.

PART - I

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BASIC RATE OF MATERIALS

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PART - II

GENERAL CONDITIONS

GENERAL CONDITIONS

1.1 Execution of work shall be carried out as per Pakistan P.W.D. Specifications, 2022.

1.2 Where there are any differences between provisions of the various documents relating to a contract, the order of precedence given below shall be followed to determine the scope of the contracted work :

(i) Schedule of Quantities of the Contract.
(ii) Specifications (Building & Road works 2022).
(iii) Standard Clauses of the Agreement.
(iv) Additional terms and conditions attached with the contract.
(v) Plans.

1.3 In addition to what has been stipulated in the standard clauses of the Agreement and additional terms and conditions attached with the contract, the rates quoted by the contractor for complete items shall include the cost of all labour, materials and every other operation involved in the execution of items of the contract of work. The rates shall also include the cost of hire charges and depreciation etc., of T. & P. Scaffolding/ Centering/Shuttering/Form work etc., as required for execution of work.

1.4 The word 'Specification' wherever occurs in the contract documents, shall mean 'Pak. P.W.D. Specifications for Building & Roads - 2022, except where specific provision to some other specifications has been made.

1.5 A bulletin of basic rates of labour and material called " CURRENT RATES BULLETIN", shall be issued by the department from time to time. Each bulletin shall be treated as part of Pak. P.W.D. Schedule 2022 for the period of its validity.

1.6 For the purpose of extra items based on market rates under clause 12 of the contract, the following order of precedence shall be followed:

(i) Bulletin of basic rates of labour and material issued by the Pakistan P.W.D. for the period of time at which work is ordered to be executed.

(ii) Basic rates of labour and material given in schedule with quoted percentage above/below the estimated cost will be considered as the first bulletin of basic rates. It will remain applicable till the second bulletin is issued.

1.7 Where the carrier carrying materials from the source to the destination need not ply empty, partly or wholly on return journey, a reduction of 50 per cent on the total amount calculated on schedule of rates given in the sub-head shall be made to arrive at the admissible rate of carriage.

1.8 Whenever floor has not been mentioned in the nomenclature of items of work, it shall mean to cover any or all the floors.

1.9 Height of a floor shall be considered up to 15 ft. (4.57 M) and extra for additional lift where the floor height exceeds 15 ft. (4.57 M) will be admissible as per schedule of rates of the relevant schedule item for extra height. The extra for additional lift due to more than 15 ft. (4.57 M) height of floor will be admissible only for items where the nomenclature of the schedule of quantities clearly mentions the floor and will not be admissible for any other item.

In case of common walls where the floor height exceeds 15 ft. (4.57 M) on one side and does not exceed 15 ft. (4.57 M) on the other side, the height of the higher side will be considered for the purpose of the applicability of the Schedule of rates.

1.10 Parapets shall be considered as part of the floors above which it has been constructed due allowance being made for height as in para 1.9 above.

1.11 Wherever lime occurs in the Specification or in the schedule of quantities it will be taken to mean "lime putty"

1.12 The Schedule and Specifications shall also apply to the airports, landing grounds and its allied structures.

1.13 Only nominal conversion figures in S.I. Units have been given in case of items not yet manufactured in System International. The corresponding standardized size of such materials will however be acceptable on the same rates as and when they are manufactured in System International.

1.14 The list of approved materials/Manufacturers is exhibited at page 3 & 4 for incorporating the names of manufacturers in the nomenclature of items of work by the divisional office while preparing estimate of the same for accord of technical sanction by the Competent Authority.

1.15 The provision for priming coat @ 20 Lbs per 100 Sft of the road surface for the flexible pavements under the sub head road and runways has been made in the schedule of Rates 2012, hence no extra payment for the same should be made forthwith.

1.16 The items of base and sub-base of schedule of Rates 2004 has been reviewed and composite items for supplying, stacking, laying and compacting for the base and sub-base are introduced in the schedule of Rates 2012. Hence no payment for supplying and stacking after deduction of voids be made in future.

1.17 Wherever Tolerance Limit has not been mentioned in items of work, it shall means tolerance limit +/- 5% of all items.

Note:

DF: **Shows Divided factor.**
MF: **Shows Multiplying factor.**

MORTARS

Code 101

MORTARS (SH-101)

Brief Specifications

1. Mud Mortar:-

   (i) Mud mortar shall be prepared from good earth clay and water, Cowdung or chopped straw shall also be added to the earth where required.
   (ii) Clay shall be mixed with water on a flat ground for at least two days. During this period, it shall be worked up at intervals with men's feet and "Phowrahs".
   (iii) Mud mortar for plastering shall be prepared as specified for each cft of earth, one cft of cowdung and ¾ kg of chopped bhoosa shall be thoroughly mixed.
   (iv) The consistency of the mud mortar for wall plastering may be thinner while for roof plastering may be of stiff consistency.

2. Cement Mortar:-

   (i) Measurement of ingredients (cement, sand, water) and mixing of mortar shall be carefully done. Cement and sand shall be thoroughly mixed in a dry state on brick paved platforms.
   (ii) Water shall be sprinkled slowly on the dry mix to make the mortar workable.
   (iii) Only such quantity of mortar shall be prepared as can be used before the initial setting time.
   (iv) A mortar which is not used within 30 minutes of addition of water shall be discarded.
   (v) Mortar shall be of ready workable consistency and have a slump of 2.75" (+ or – ¼").
   (vi) In area where the salt contents of soil are greater, all cement mortar shall be prepared using Sulphate Resisting cement.

3. Lime Surki Mortar:-

   (i) Measurements of ingredients (slaked and screened stone lime/canker lime, surki/sand and water) and mixing of mortar shall be done carefully.
   (ii) Thoroughly, slaked and screened stone lime and sand shall be measured in boxes and mixed on a pucca platform. These ingredients shall be mixed with water sufficient to produce a mortar of specified consistency.
   (iii) One part of lime mixed with two parts of surki/sand by volume shall be kept under water for at least 12hours and then made to pass through a screen of 144 meshes per square inch. The mortar shall be applied as fresh as possible.

4. Lime Mortar:-

   (i) Measurements of ingredients (port land cement, slaked stone lime, sand and water) and mixing shall be done in proportions by volume.
   (ii) Thoroughly, slaked and screened stone lime and sand in requisite quantities shall be mixed and then necessary quantity of cement shall be added. When this has been uniformly thoroughly mixed, a quantity of water sufficient to give a mortar of desired consistency shall be added.

PAKISTAN PUBLIC WORKS DEPARTMENT

MORTAR

SUB-HEAD CODE 101

S. No.	Description	Unit	Rate in Rs.
	N.B. - THE RATES EXCLUDE WATER CHARGES AND CONTRACTOR'S PROFIT.		
	LIME MORTAR		
1	Lime, sand mortar 1:2 (1 lime: 2 sand)	Per Cft	221.94
		Cu.m.	7,837.58
2	Lime, sand mortar 1:3 (1 lime: 3 sand).	Per Cft	187.70
		Cu.m.	6,628.49
3	Lime surkhi mortar 1: 1-1/2 (1 lime: 1-1/2 surkhi)	Per Cft	214.65
		Cu.m.	7,580.13
4	Lime. surkhi mortar 1:2 (1 lime: 2 surkhi)	Per Cft	191.99
		Cu.m.	6,779.89
5	Lime, surkhi mortar 1:3 (1 lime: 3 surkhi)	Per Cft	161.08
		Cu.m.	5,688.44
6	Lime, sand and surkhi mortar 1:1:1 (1 lime: 1 sand and 1 surkhi).	Per Cft	191.08
		Cu.m.	6,747.82
7	Lime, sand and surkhi mortar 1:2:1 (1 lime:2 sand and 1 surkhi).	Per Cft	161.60
		Cu.m.	5,706.82
8	Lime, cinder mortar 1:1 (1 lime: 1 cinder).	Per Cft	236.54
		Cu.m.	8,353.46
9	Lime, cement and sand mortar 1:1:3 (1 lime: 1 cement and 3 sand).	Per Cft	360.80
		Cu.m.	12,741.56
10	Lime, cement and sand mortar 1:1:4 (1 lime: 1 cement and 4 sand).	Per Cft	289.46
		Cu.m.	10,222.29
11	Lime, cement and sand mortar 1:1:5 (1 lime: 1 cement and 5 sand).	Per Cft	259.68
		Cu.m.	9,170.67
12	Lime, cement and sand mortar 1:1:6 (1 lime: 1 cement and 6 sand).	Per Cft	237.77
		Cu.m.	8,396.80
13	Lime, cement and sand mortar 1:1:7 (1 lime: 1 cement and 7 sand).	Per Cft	221.59
		Cu.m.	7,825.39
14	Lime, cement and sand mortar 1:1:8 (1 time: 1 cement and 8 sand).	Per Cft	204.21
		Cu.m.	7,211.74
15	Lime, cement and sand mortar 1:1:9 (1 lime: 1 cement and 9 sand).	Per Cft	195.84
		Cu.m.	6,915.97
16	Lime, cement and sand mortar 1:1:10 (1 lime: 1 cement and 10 sand).	Per Cft	187.25
		Cu.m.	6,612.81
17	Cement, lime and sand mortar 1:2:6 (1 cement 2 lime and 6 sand).	Per Cft	241.08
		Cu.m.	8,513.52
18	Cement, lime and sand mortar 1:2:9 (1 cement 2 lime and 9 sand).	Per Cft	213.87
		Cu.m.	7,552.92
	CEMENT SAND MORTAR		
19	Cement, sand mortar 1:1 (1 cement: 1 sand)	Per Cft	494.43
		Cu.m.	17,460.47
20	Cement, sand mortar 1:1-1/2 (1 cement: 1-1/2 sand)	Per Cft	415.09
		Cu.m.	14,658.84
21	Cement, sand mortar 1:2 (1 cement: 2 sand)	Per Cft	364.50
		Cu.m.	12,872.28
22	Cement, sand mortar 1:2-1/2 (1 cement: 2-1/2 sand)	Per Cft	321.03
		Cu.m.	11,337.06
23	Cement, sand mortar 1:3 (1 cement: 3 sand)	Per Cft	285.66

MORTAR

SUB-HEAD CODE 101

S. No.	Description	Unit	Rate in Rs.
		Cu.m.	10,087.91
24	Cement, sand mortar 1:4 (1 cement: 4 sand).	Per Cft	241.09
		Cu.m.	8,514.06
25	Cement, sand mortar 1:5 (1 cement: 5 sand).	Per Cft	216.11
		Cu.m.	7,631.73
26	Cement, sand mortar 1:6 (1 cement: 6 sand).	Per Cft	193.57
		Cu.m.	6,835.80
27	Cement, sand mortar 1:7 (1 cement: 7 sand).	Per Cft	179.29
		Cu.m.	6,331.55
28	Cement, sand mortar 1:8 (1 cement 8 sand).	Per Cft	167.21
		Cu.m.	5,905.09
	CLAY MORTAR		
29	Clay mortar.	Per Cft	65.52
		Cu.m.	2,313.81
30	Clay mortar mixed with chopped bhoosa or straw.	Per Cft	75.92
		Cu.m.	2,681.09
31	Clay mortar mixed with cowdung 1:1 (one clay : 1 cowdung) & chopped bhoosa straw.	Per Cft	151.84
		Cu.m.	5,362.17
	FINISHING MORTAR		
32	White cement and sand mortar 1:3 (1 white cement: 3 sand).	Per Cft	540.49
		Cu.m.	19,087.10
33	Coloured cement mortar made by mixing white cement and pigment of approved shade (one white cement mixed with pigment of approved shade : 2 sand).	Per Cft	1,921.13
		Cu.m.	67,844.26
34	34. White cement and sand mortar 1:2 (1 white cement : 2 sand).	Per Cft	714.15
		Cu.m.	25,220.13
35	Coloured cement made by mixing grey cement and pigment of approved shade (one grey cement mixed with pigment of approved shade : 2 sand).	Per Cft	1,569.25
		Cu.m.	55,417.44
36	Lime putty and plaster of Paris 4:1 mortar (4 lime putty : 1 plaster of Paris).	Per Cft	348.34
		Cu.m.	12,301.63
37	Lime putty and plaster of Paris 2:1 mortar (2 lime putty :1 plaster of Paris).	Per Cft	481.69
		Cu.m.	17,010.86
38	Barium sulphate, cement, sand mortar 1:1:3 (1 barium sulphate : 1 cement: 3 sand).	Per Cft	1,420.54
		Cu.m.	50,165.80

PREPARATION OF SITE

Code 102

PREPARATION OF SITE (S.H-102)

Brief *Specifications*

1. Clearance of Site/Jungle:-

1. Preparation of site shall mean the general cleanliness and dressing up of the site for the proposed construction and shall include, clearance of the whole area of obstruction, general clearance, cutting and filling, leveling and dressing and making approach or access roads.
2. Bamboo, jungle wood, brushwood and trees will be cut down and their roots grubbed up.
3. Jungle with a density greater than 50% shall be treated as dense and where the density is less than 50% it shall be treated as ordinary jungle.
4. No extra measurements or allowance shall be made for small trees not exceeding 9" inches/225mm girth at 24 inches/60cm from the ground. Trees exceeding 9" inches/225mm shall be cut down by other agency.
5. All holes or hollows whether originally existing or produced by digging up the roots shall be carefully filled up with earth brought from outside if necessary, well rammed and leveled off as desired by Engineer-In-Charge.
6. The useful products from clearing shall be stacked as directed by Engineer-In-Charge. These products shall be the property of the Government.
7. The useless material obtained shall be removed and disposed off with in specified lead as directed by Engineer-In-Charge.
8. The contractor shall be responsible to provide warning signs, caution signs, cordoning of the area and adequate lighting. He shall also be responsible for making approach or access roads.
9. The contractor shall provide adequate storage for building materials to be used for construction. These stores shall be built at such a spot where there is no hindrance either to the storage, sheds or to the construction itself.

Note :- In case of jungle clearance the contractor should obtain written orders from the Engineer-In-Charge before starting the work of jungle clearance. If no such prior instructions are issued classifying the density of jungle, the contractor will carry out the work at the rate of earth work and no extra payment will be admissible for jungle clearance.

PAKISTAN PUBLIC WORKS DEPARTMENT

PREPARATION OF SITE

SUB-HEAD CODE 102

S. No.	Description	Unit	Rate in Rs.
1	Clearing jungle (ordinary) by cutting, removing all shrubs, trees, upto 6 inches (152 mm) girth, etc. and taking out their entire roots and filling the hollows with earth complete with dressing, consolidating and watering the filling including stacking the serviceable materials and disposal of useless material as directed, lead to 10 chains (305 Rm), cost of earth included.	100 Sq.ft	25.23
		Sq.m.	2.72
2	Clearing jungle (dense) by cutting, removing all shrubs, trees, upto 6 inches (152 mm) girth, etc. and taking out their entire roots and filling the hollows with earth complete with dressing, consolidating and watering the filling including stacking the serviceable materials and disposal of useless materials as directed, lead upto 10 chains (305 Rm), cost of earth included.	100 Sq.ft	249.18
		Sq.m.	26.82
3	Felling trees of any height, girth exceeding 6 inches to one foot (152 mm to 305 mm), cutting into portable pieces, taking out their entire roots and filling hollows with earth complete with dressing, consolidating and watering the filling including stacking the serviceable materials and disposal of useless materials as directed, lead upto 10 chains (305 Rm), cost of earth included.	Each	623.75
		Each	623.75
4	Felling trees of any height, girth exceeding one foot (305 Rm), cutting into portable pieces, taking out their entire roots and filling the hollows with earth complete with dressing, consolidating and watering the filling including stacking the serviceable materials as directed, lead upto 10 chains (305 Rm), cost of earth included.	Foot girth	853.85
		m.gth	2,801.36
5	Levelling and dressing the ground by cutting and filling earth upto 6 inches (152 mm) in depth including consolidating and watering, complete as required.	100 Sq.ft	332.50
		Sq.m.	35.79
6	Cutting to a required gradient in all kinds of soil (except rock murum and gravelly soil) and filling and excavated stuff in 6 inches (152 mm) layers in depression, where required or disposing the same complete with levelling, dressing and watering the filling and consolidation etc. as required, lead upto one chain (30.5 Rm) average, and lift upto 5 feet (1.52 Rm).	100 Cft.	1,929.06
		Cu.m.	681.24
7	Cutting to a required gradient in all kinds of soil (except rock) and dressing the ground by bulldozers, grader or scraper including disposal of excavated stuff within 3 chains (91.5 Rm) including all lifts as required.	100 Cft.	190.83
		Cu.m.	67.39
8	Cutting to a required gradient in gravelly soil and filling excavated stuff in 6 inches (152 mm) layers in depressions where required or disposing the same complete with levelling and dressing, watering the fillings and consolidation etc. as required, lead upto one chain (30.5 Rm) average, and lift upto 5 feet (1.52 m).	100 Cft.	2,168.63
		Cu.m.	765.84
9	Cutting to a required gradient in all kinds of murum soil and filling the excavated stuff in 6 inches (152 mm) layers in depressions where required or disposing the same complete with levelling, dressing, watering the filling and consolidation etc. as required, lead upto one chain (30.5 Rm) average, and lift upto 5 feet (1.52 m).	100 Cft.	2,287.38
		Cu.m.	807.78

PREPARATION OF SITE
SUB-HEAD CODE 102

S. No.	Description	Unit	Rate in Rs.
10	Cutting to a required gradient in soft, or disintegrated rock by hammering and chiseling and jumper work including sorting out and stacking serviceable and unserviceable materials separately, complete with levelling and dressing as required, lead upto one chain (30.5 Rm), average, and lift upto 5 feet (1.52 m).	100 Cft. Cu.m.	4,327.00 1,528.07
11	Cutting to required gradient in hard rock by hammering and chiselling and jumper work including sorting out and stacking serviceable and unserviceable materials separately, complete with levelling and dressings as required, lead upto one chain (30.5 R.m) average, and lift upto 5 feet (1.52 m.).	100 Cft Cu.m.	10,772.63 3,804.32
12	Cutting to required gradient in hard rock by blasting including sorting out and stacking serviceable and unserviceable materials complete with levelling and dressing as required, lead upto one chain (30.5 R.m) average and lift upto 5 feet (1.5 m).	100 Cft Cu.m.	6,120.63 2,161.48
13	Filling depressions with excavated stuff in 6 inches (152 mm) layers within one chain (30.5 R.m) lead including levelling, dressing, watering and consolidating complete.	100 Cft Cu.m.	1,043.13 368.38
14	Supplying and filling approved quality imported earth in depressions within a radius of 5 miles (8 km) including breaking clods, levelling, dressing, watering and consolidating in 6 inches (152 mm) layers etc. complete, including all lifts.	100 Cft Cu.m.	3,662.48 1,293.39
15	Disposal of surplus excavated stuff distinct from the materials and the rubbish accumulated during construction upto one chain lead (average) and 5 feet (1.52 m) lift, levelling etc. complete.	100 Cft Cu.m.	1,071.38 378.35
16	Rolling the surface dry with hand roller of 1/2 ton (0.508 m ton) weight as per direction of the Engineer-in-charge.	100 Sft Sq.m.	225.63 24.29
17	Rolling the surface dry with light power roller (upto 6 tons or 6.09 m. ton) as directed by the Engineer-in-charge.	100 Sft Sq.m.	344.38 37.07
18	Removing old debris and rubbish of all kinds and sizes within a lead of one chain (30.5 R.m) including all lifts.	100 Cft Cu.m.	909.38 321.14
19	Add for additionaHift of every 3 feet (0.9 mm) or thereof in items No.6,8 and 9.	100 Cft Cu.m.	237.50 83.87
20	Add for additional lift of every 3 feet (0.9 m) or part there of in items 10 to 12.	100 Cft Cu.m.	59.38 20.97
21	Add for additional lead of every one chain (30.5 R.m) or part thereof in item Nos. 6,8,9,13,15 and 18.	100 Cft Cu.m.	237.50 83.87
22	Add for additional lead of every one chain (30.5 R.m) or part thereof in item Nos. 10 to 12.	100 Cft Cu.m.	296.88 104.84

EXCAVATION

Code 103

EXCAVATION (S.H-103)

Brief Specifications

1. Measures:-

(a) Solid Measure:-	Material in their natural state before excavation.
(b) Loose Measure:-	A packed Measure, not rammed or equally consolidated.
(c) Packed Measure:-	Materials which have been spread, leveled or filled and watered and consolidated.

2. Borrow Pits:-

Are to be made only in the areas and of the size and shape approved by the Engineer-In-Charge, when measurements are taken from borrow pits, the average length, breath and height shall be taken on each such pit.

3. Profiles:-

The profile pillars make of concrete or masonry shall indicate correct plinth levels, foundation bed levels and tope of bed concrete, including center lines of the walls constructed outside the periphery of the proposed structure at the cost of the contractor.

4. Classification of Soil:-

(a) Ordinary Soil includes:-

i) Spoil or rubbish of every description.
ii) Earth and Sandy loam.
iii) Any other formation into which a spade can be entered and can be easily excavated by the application of Kassi, pick of shovel.
iv) Loose or medium stiff clay, silt, sand, gravel and mud loam.

(b) Murum, Conglomerate, Gravels & Hard Soil Includes:-

i) A stiff and heavy clay soil which can be dug with repeated blows of Kassi or pick axe.
ii) Soil having canker or boulders up to 15% which can be dug and removed alongwith the soil.
iii) Hard Murum, boulder which can be individually lifted by hand.
iv) Conglomerate/gravel formation, shale, lime concrete brick work and stone masonry in lime.
v) Metalled surface of road, Hard core under floor and mud concrete.
vi) Any other formation into which a shovel cannot enter with foot pressure and the excavation which requires the forceible application of a pick.

(C) Soft Rock Includes:-

i) Soft varieties of lime stone, sand stone or fissured stone or any other formation which can be excavated by the use of picks, jumpers, shovels, wedges, hammers etc and do not require blasting.

ii) Large boulder which cannot be individually lifted by hand.

(d) Rock Requiring Blasting Includes:-

i) Hard stratified rock, compact hard lime stone, Hard sand stone or un-fissured and un-stratified masses like granite etc.

ii) Such formation which cannot be excavated by the use of jumpers, wedges, hammers and picks etc.

Note-1:- In case of dispute on the classification of rock, it will be decided by means of appropriate number of bore holes to the depths required at the site. Decision of Superintending Engineer, in this regard will be treated final.

Note-2:- Blasting shall not be performed with out the prior permission of the Engineer-In-Charge. The contractor shall take all necessary precautions for safety of persons and property etc and shall comply with all instructions as may be issued by the Engineer-In-Charge.

(e) Rock Requiring Blasting, Where Blasting Is Not Permissible.

i) Rock which requires blasting shall not be blasted when the site is in built up area.

ii) In such cases, the rock shall be chiseled out manually or by mechanical devices to the exact dimensions.

(f) Antique, Coins, Fossils etc Obtained From Excavation.

Materials of any kind obtained from excavation. any finds made on the site such as antique, relies, coins, fossils etc shall remain the property of Government. The rates include the separation of the aforementioned materials and finds from each other and depositing the same, all as directed by the Engineer-In-Charge.

5. METHOD/MEASUREMENT FOR EXCAVATION:-

i) Excavations are to be restricted to the minimum dimensions necessary, and payment is to be made on the basis of net requirement.

ii) In excavation through varying strata the different layer are to paid for at the rates for the respective formation as specified in the item of work.

iii) Excavation of trenches for pipe, cable etc. The widths shall be the external diameter of the pipes (Not sockets) cables etc, plus (9") 225mm. For depths exceeding 1.5m, slope allowances of 125mm (5").

iv) per meter (in depth for each side of the trenches) shall be made in addition to the width specified for full depth of trench.

v) Any pipes, cables etc met with and damaged during excavation, would be repaired/replaced as directed by Engineer-In-Charge with out extra cost.

vi) In Excavation of tanks; the slopes are not to be steeper than the angle of repose of the soil in which the tank is excavated.

vii) All water which may accumulate on the site during excavation work, due to rain shall be bailed out, by the contractor at his own expense.

PAKISTAN PUBLIC WORKS DEPARTMENT

EXCAVATION
SUB-HEAD CODE 103

S. No.	Description	Unit	Rate in Rs.
	Trenches and Drains		
1	Excavation for foundation trenches and drains in all kinds of soil (except gravelly and murum soil, wet silt, clay or mud conglomeration of gravel and boulders, soft, sandy or disintegrated sandy and hard rock) and back filling the excavated material in foundation, plinth or under floor including breaking clods, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction, dressing and disposal of surplus excavated stuff as directed, lead upto one chain (30.5 R.m) and lift upto 5 feet (1.52 m).	100 Cft	1,624.63
		Cu.m.	573.73
2	Excavation for foundation trenches and drains in gravelly soil and back filling the excavated material in foundation trenches plinth or under floor including breaking clods, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction, dressing and disposal of surplus excavated stuff as directed lead upto one chain (30.5 R.m) and lift upto 5 feet (1.52 m).	100 Cft	1,862.13
		Cu.m.	657.60
3	Excavation for foundation trenches and drains in all kinds of murum soil and back filling the excavated material in foundation trenches plinth or under floor including breaking clods, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction, dressing and disposal of surplus excavated stuff as directed lead upto one chain (23.5 R.m) and lift 5 feet (1.52 m).	100 Cft	2,010.56
		Cu.m.	710.02
4	Excavation for foundation trenches and drains in wet silt clay or mud and back filling the excavated material in foundation trenches, plinth or under floor including breaking clods, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction, dressing and disposal of surplus excavated stuff as directed lead upto one chain (30.5 R.m) and lift upto 5 feet (1.52 m).	100 Cft	2,755.25
		Cu.m.	973.01
5	Excavation for foundation trenches and drains in strata of conglomeration of gravel and boulders by hammering, chiselling and jumper work including stacking of serviceable and unserviceable materials separately, lead upto one chain (30.5 R.m) and lift upto 5 feet (1.52 m).	100 Cft	5,547.38
		Cu.m.	1,959.04
6	Excavation for foundation trenches and drains in strata of conglomeration of gravel and bounders by blasting where pick and jumper work is not possible including stacking of serviceable and unserviceable materials separately, lead upto one chain (30.5 R.m) and lift upto 5 feet (1.52 m).	100 Cft	3,346.75
		Cu.m.	1,181.89
7	Excavation for foundation trenches and drains in soft or disintegrated rock by hammering, chiselling and Jumper work including, stacking of serviceable and unserviceable materials separately, lead upto one chain (30.5 R.m) and lift upto 5 feet (1.52 m).	100 Cft	2,328.63
		Cu.m.	822.35

EXCAVATION

SUB-HEAD CODE 103

S. No.	Description	Unit	Rate in Rs.
8	Excavation for foundation trenches and drains in hard rock by hammering chiselling and jumper work including stacking of serviceable and unserviceable materials separately, lead upto one chain (30.5 R.m) and lift upto 5 feet (1.52 m).	100 Cft Cu.m.	4,434.88 1,566.16
9	Excavation for foundation trenches and drains in hard rock by blasting where pick and Jumper work is not possible including stacking of serviceable and unserviceable materials separately, lead upto one chain (30.5 R.m) and lift upto 5 feet (1.52 m).	100 Cft Cu.m.	3,895.50 1,375.68
	Raft Foundations Rectangular, underground Tanks and SepticTanks.		
10	Excavation for raft foundations, underground tanks and septic tanks (rectangular or square) in all kinds of soil (except gravelly and murum soil wet silt, clay or mud, conglomeration of gravel and boulders, soft, sandy or disintegrated and hard rock) and back filling the excavated material all round the trenches including breaking clods, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction, dressing and disposal of surplus excavated stuff as directed, lead up to one chain (30.5 R.m) and lift upto 5 feet (1.52 m).	100 Cft Cu.m.	1,358.75 479.84
11	Excavation for raft foundations, underground tanks, septic tanks (rectangular or square) in gravelly soil and back filling the excavated material all round the trenches including breaking clods, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction, dressing and disposal of surplus excavated stuff as directed, lead up to one chain (30.5 R.m) and lift upto 5 feet (1.52 m).	100 Cft Cu.m.	1,566.56 553.23
12	Excavation for raft foundations, underground tanks and septic tanks (rectangular or square) in all kinds of murum soil and back filling the excavated material all round the trenches including breaking clods, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction, dressing and disposal of surplus excavated stuff as directed, lead up to one chain (30.5 Ru.m) and lift up to 5 feet (1.52 m).	100 Cft Cu.m.	1,685.31 595.16
13	Excavation for raft foundations, underground tanks and septic tanks (rectangular or square) in wet silt clay or mud and back filling the excavated material all round the trenches including breaking clods, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction, dressing and disposal of surplus excavated stuff as directed, lead up to one chain (30.5 R.m) and lift up to 5 feet (1.52 m).	100 Cft Cu.m.	2,222.19 784.76
14	Excavation for raft foundations, underground tanks and septic tanks (rectangular or square) in strata of conglomeration of gravel and boulders by hammering, chiselling and jumper work including stacking of serviceable and unserviceable materials separately, lead upto one chain (30.5 R.m) and lift up to 5 feet (1.52 m).	100 Cft Cu.m.	3,752.00 1,325.01

EXCAVATION

SUB-HEAD CODE 103

S. No.	Description	Unit	Rate in Rs.
15	Excavation for raft foundations, underground tanks and septic tanks (rectangular or square)in strata of conglomeration of gravel and boulders by blasting, where pick and jumper work is not possible including stacking of serviceable and unserviceable materials separately, lead up to one chain (30.5 r) and lift up to 5 feet (1.52 m).	100 Cft Cu.m.	3,228.00 1,139.96
16	Excavation for raft foundations, underground tanks and septic tanks (rectangular or square) in soft of disintegrated rock by hammering and chiselling, and jumper work including stacking of serviceable and unserviceable materials separately, lead upto one chain (30.5 R.m) and lift up to 5 feet (1.52 m).	100 Cft Cu.m.	3,033.25 1,071.18
17	Excavation for raft foundations underground tanks and septic tanks (rectangular or square) in hard rock by hammering, chiselling, and jumper work including stacking of serviceable and unserviceable materials separately, lead up to one chain (30.5 Ru.m) and lift up to 5 feet (1.52 m).	100 Cft Cu.m.	4,434.88 1,566.16
18	Excavation for raft foundations underground tanks and septic tanks (rectangular or square) in hard rock by blasting where pick and jumper work is not possible including stacking of serviceable and unserviceable materials separately, leak up to one chain (30.5 Ru.m) and lead upto 5 feet (1.52 m).	100 Cft Cu.m.	5,201.75 1,836.98
	Wells, circular Underground Tanks and Soak-pits		
19	Excavation for wells, circular underground tanks and soak spits etc., in all kinds of soil (except gravelly and murum soil, wet silt clay or mud, conglomeration of gravel and boulders, soft. sandy or disintegrated and hard rock) and back filling the excavated material all round the trenches including breaking clods, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction, dressing and disposal of surplus excavated stuff as directed, lead up to one chain (30.5 Ru.m) and lift up to 5 feet (1.52 m).	100 Cft Cu.m.	1,507.19 532.26
20	Excavation for wells, circular underground tanks and soak pits etc., in gravelly soil and back filling the excavated material all round the trenches including breaking clods, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) depth to full compaction, dressing and disposal of surplus excavated stuff as directed, lead up to one chain (30.5 R.m) and lift up to 5 feet (1.52 m).	100 Cft Cu.m.	1,744.69 616.13
21	Excavation for wells, circular underground tanks and soak pits etc., in all kinds of murum soil and back filling the excavated material all round the trenches including breaking clods, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction, dressing and disposal of surplus excavated stuff as directed, lead up to one chain (30.5 R.m) and lift upto 5 feet (1.52 m).	100 Cft Cu.m.	1,863.44 658.07

EXCAVATION
SUB-HEAD CODE 103

S. No.	Description	Unit	Rate in Rs.
22	Excavation for wells, circular underground tanks and soak pits etc.,in wet silt, clay or mud and back filling the excavated material all round the trenches, including breaking clods, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction, dressing and disposal of surplus excavated stuff as directed lead upto one chain (30.5 R.m) and lift upto 5 feet (1.52 m).	100 Cft Cu.m.	2,608.13 921.05
23	Excavation for wells, circular underground tanks and soak pits etc., in strata of conglomeration of gravel and boulders by hammering, chiselling and jumper work including stacking of serviceable and unserviceable material separately, lead up to one chain (30.5 R.m) and lift up to 5 feet (1.52 m).	100 Cft Cu.m.	4,108.25 1,450.82
24	Excavation for wells, circular underground tanks and soak pits etc., in strata of conglomeration of gravel and boulders by blasting where pick and jumper work is not possible including stacking of serviceable and unserviceable materials separately, lead up to one chain (30.5 R.m) and left up to 5 feet (1.52 m).	100 Cft Cu.m.	3,843.63 1,357.36
25	Excavation for wells, circular underground tanks and soak pits etc., in soft or disintegrated rock by hammering, chiselling and jumper work including stacking of serviceable and unserviceable materials separately, lead up to one chain (30.5 R.m) and lift up to 5 feet (1.52 m).	100 Cft Cu.m.	3,152.00 1,113.12
26	Excavation for wells, circular underground tanks and soak pits etc., in hard rock by hammering, chiselling and jumper work including stacking of serviceable and unserviceable materials, separately, lead up to one chain (30.5 R.m) and lift up to 5 feet (1.52 m).	100 Cft Cu.m.	4,864.50 1,717.88
27	Excavation for wells, circular underground tanks and soak pits etc., in hard rock by blasting where pick and jumper work is not possible including stacking of serviceable and unserviceable materials separately, lead up to one chain (30.5 R.m) and lift up to 5 feet (1.52 m).	100 Cft Cu.m.	4,136.38 1,460.75
28	Add for additional lift of every three feet (0.9 m) or part thereof in item Nos. 1 to 4, 10. to 13 and 19 to 22.	100 Cft Cu.m.	237.50 83.87
29	Add for additional lift of every three feet (0.9 m) or part thereof in item Nos. 5 to 9. 14 to 18 and 23 to 27.	100 Cft Cu.m.	296.88 104.84
30	Add for additional leed of every one chain (30.5 R.m) or part thereof in item Nos. 1 to 4. 10 to 13 and 19 to 22.	100 Cft Cu.m.	237.50 83.87
31	Add for additional lift of every one chain (30.5 R.m) or part thereof in item Nos. 5 to 9. 14 to 18 and 23 to 27.	100 Cft Cu.m.	296.88 104.84

EXCAVATION

SUB-HEAD CODE 103

S. No.	Description	Unit	Rate in Rs.
	Timbering.		
32	Providing and fixing close timbering in foundation trenches. drains, underground tanks, wells, septic tanks, and soak pits etc., including strutting and shoring etc., and removal of timbering complete for depth up to 5 feet (1.52 m).	100 Sq.ft Sq.m	4,943.31 532.09
33	Providing and fixing close timbering in foundation trenches, drains, underground tanks, wells, septic tanks, and soak pits etc., including strutting and shoring etc., and removal of timbering complete for depth exceeding 5 feet (1.52 R.m.) and up to 10 feet (3 m).	100 Sq.ft Sq.m	5,719.16 615.60
34	Providing and fixing close timbering in foundation trenches. drains, underground tanks, wells, septic tanks, and soak pits etc., including strutting and shoring etc., and removal of timbering complete for depth exceeding 10 feet (3R.M) and up to 15 feet (4.5 R.M).	100 Sq.ft Sq.m	7,893.46 849.64
35	Providing and fixing close timbering in foundation trenches, drains, underground tanks, wells, septic tanks, and soak pits etc, including strutting and depth exceeding 15 feet (4.5 R.m) and up to 20 feet (6. RM).	100 Sq.ft Sq.m	8,470.02 911.70
36	Providing and fixing open timbering in foundation trenches, drains, underground tanks, wells, septic tanks and soak pits etc. including strutting and shoring etc. and removal of timbering complete for depth up to 5 feet (1.52 m).	100 Sq.ft Sq.m	3,449.83 371.34
37	Providing and fixing open timbering in foundation trenches, drains, wells, underground tanks, septic tanks and soak pits etc. including strutting and shoring etc. and removal of timbering complete for depth up to 5 feet (1.52 R.m) and upto 10 feet (3. Rm).	100 Sq.ft Sq.m	4,225.83 454.86
38	Providing and fixing open timbering in foundation trenches, drains, wells, underground tanks, septic tanks and soak pits etc. including strutting and shoring etc. ad removal of timbering complete for depth exceeding 10 feet (3. R.m) and up to 15 feet (4.5 Rm).	100 Sq.ft Sq.m	5,664.70 609.74
39	Providing and fixing open timbering in foundation trenches, drains, wells, underground tanks, septic tanks and soak pits etc. including strutting and shoring etc. ad removal of timbering complete for depth exceeding 15 feet (4.5 R.m) and up to 20 feet (6. Rm).	100 Sq.ft Sq.m	6,478.76 697.37
	Bailing out water.		
40	Bailing or pumping out sub-soil water during excavation, concreting, cast in situ concrete or masonry work in foundation etc. (only three operations to be allowed, trench volume under water to be measured first time for excavation, second time for concreting, and third time for cast in situ concrete or masonry work in foundaton etc,.	100 Cft Cu.m.	632.50 223.37

EXCAVATION
SUB-HEAD CODE 103

S. No.	Description	Unit	Rate in Rs.
	EXECAVATION BY MECHANICAL MEANS		
41	Structure excavation in Comman Material by mechanical means and dispose of surplus excavated material upto 10 mile leed complete as per direction of Engineer incharge.	100 Cft	1,078.09
		Cu.m.	380.72
42	Structural Excavation in common material below water level by mechanical means and dispose of surplus excavated material upto 10 mile leed complete as per direction of Engineer incharge.	100 Cft	12,759.47
		Cu.m.	4,505.97
43	Structural Excavation in Hard Rock Material by mechanical by mechanical means and dispose of surplus excavated material upto 10 mile leed complete as per direction of Engineer incharge.	100 Cft	3,754.29
		Cu.m.	1,325.81
44	Structural Excavation in Medium Rock Material by mechanical by mechanical means and dispose of surplus excavated material upto 10 mile leed complete as per direction of Engineer incharge.	100 Cft	3,023.69
		Cu.m.	1,067.81
45	Structural Excavation in Medium Soft Rock Material by mechanical means and dispose of surplus excavated material upto 10 mile leed complete as per direction of Engineer incharge.	100 Cft	2,018.53
		Cu.m.	712.84

FILLING

Code 104

FILLING (S.H-104)

Brief Specifications

General:-

The earth for filling must be free from all vegetables, alkali and other deleterious matter. Earth which contains greater than 0.5% of salt, and greater than 0.15% of sulphates will not be allowed to use in filling.

Earthwork-Back Filling:

i) In case of back filling of trenches/plinth, the space must be cleared of all loose debris and filled with good earth, all clods being broken.
ii) Back filling should be done in pace with masonry work in such a manner that no back filling is done when the masonry is green.
iii) The filling shall be in 6" 152 mm layers, each being well watered and rammed.
iv) No payment will be made separately for the back filling with the excavated staff.

Earth work in filling:-

This work shall constitute the filling of earth for raising the building sites by excavation from borrowpits and carriage to the sites. The earth used for filling shall conform to the Specification mentioned above regarding the permissible salt contents.

Sand Filling:-

i) Sand shall be laid in not more than 6" inches/152 mm in the manner approved by Engineer-in-Charge.
ii) The surface of the consolidated sand will be dressed to the required slope.
iii) For the purpose of measurement the depth of filling shall be taken as consolidated depth.

PAKISTAN PUBLIC WORKS DEPARTMENT

FILLING

SUB-HEAD CODE 104

S. No.	Description	Unit	Rate in Rs.
1	Filling excavated earth available at site in foundation, plinth or under floor, etc. including breaking clods, dressing, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction complete within a lead of one chain (30.5 R.m) and lift of 5 feet (1.52m).	100 Cft Cu.m.	735.19 259.63
2	Filling sand available at site in foundation, plinth or under floor, etc. to a required slope including dressing, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction complete within a lead of one chain (30.5 R.m) and lift of 5 feet (1.52 m).	100 Cft Cu.m.	794.56 280.60
3	Filling murum available at site in foundation, plinth or under floor, etc. including breaking clods, dressing, watering consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction, complete within a lead of one chain (30.5 R.m) and lift of 5 feet (1.52 m).	100 Cft Cu.m.	794.56 280.60
4	Filling bajri available at site in foundation plinth or under floor, etc. including dressing, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction, complete within a lead of one chain (30.5 R.m) and lift of 5 feet (1.52 R.m).	100 Cft Cu.m.	794.56 280.60
5	Filling stone available at site in foundation plinth or under floor, etc. including spreading, filling voids with spawl and chips and consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction complete within a lead of one chain (30.5 R.m) and lift of 5 feet (1.52 m).	100 Cft Cu.m.	2,382.50 841.37
6	Filling brick bats available at site in foundation, plinth or under floor, etc. including spreading, filling voids with smaller bats and consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction complete within a lead of one chain (30.5 R.m) and lift of 5 feet (1.52 m)..	100 Cft Cu.m.	2,084.13 736.00
7	Supplying earth from approved site within the area acquired including digging or cutting, loading, unloading and filling in foundation trenches, plinth or under floor etc. including breaking clods, dressing watering and consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction complete within a lead of one chain (30.5 R.m) and lift of 5 feet (1.52 m) as directed by the Engineer-in-charge.	100 Cft Cu.m.	1,507.81 532.48
8	Supplying earth from approved outside sources within a radius of 5 miles (8 km) including digging, loading and unloading and filling in foundation trenches, plinth or under floor, etc. including breaking clods, dressing, watering and consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction complete within a ;lead of one chain (30.5 R.m) and lift of 5 feet (1.52 m).	100 Cft Cu.m.	3,254.05 1,149.16

FILLING

SUB-HEAD CODE 104

S. No.	Description	Unit	Rate in Rs.
9	Supplying stacking and filling sand of approved quality from outside sources in foundation, trenches, plinth or under floor, etc. including dressing, watering and consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction and lift upto 5 feet (1 .52 m).	100 Cft	4,869.94
		Cu.m.	1,719.80
10	Supplying, stacking and spreading murum from approved quarries to required slope including consolidation by ramming and watering etc. complete..	100 Cft	3,369.94
		Cu.m.	1,190.08
11	Supplying, stacking and spreading screened bajri from approved quarries to required slope including consolidation by ramming and watering etc. complete.	100 Cft	6,494.94
		Cu.m.	2,293.67
12	Supplying, stacking, spreading and filling stones of required size to required slope from approved quarries in plinth or under floor including filling voids with spawl and chips and consolidation by ramming layers not exceeding 9 inches (229 mm) in depth to full compaction lift upto 5 feet (1.52 m).	100 Cft	4,562.87
		Cu.m.	1,611.37
13	Supplying, stacking, spreading soil aggregate (Ghara / Pit pan gravel) and sand (a mixture of natured and crushed stone) as approved by Engineer incharge i/c watering , conslidation , compaction to required density with power robber i/c all lead and lift (actual compacted depth shall be considered for payment.	100 Cft	5,736.25
		Cu.m.	2,025.74
14	Extra for additional lift of every 3 feet (0.9 m) or part thereof in item Nos. 1 to 4 and 7 to 11.	100 Cft	237.50
		Cu.m.	83.87
15	Extra for additional lift of every 3 feet (0.9 m) or part thereof in item Nos. 5 and 6.	100 Cft	251.75
		Cu.m.	88.90
16	Extra for additional lead of every one chain (30.5 R.m) or part thereof in item Nos. 1 to 4 and 7 to 11.	100 Cft	237.50
		Cu.m.	83.87
17	Extra for additional lead of every one chain (30.5 R.m) or part thereof in Item Nos. 5 and 6.	100 Cft	251.75
		Cu.m.	88.90

CONCRETE WORK IN FOUNDATION

Code 105

PAKISTAN PUBLIC WORKS DEPARTMENT

CONCRETE WORK IN FOUNDATION

SUB-HEAD CODE 105

Note:

The Specification of Reinforced cement concrete has been prepared & inserted in the introduction of Sub-Head No. 114 which also cover concrete work in foundation. Execution work shall be carried out as per above Specifications. Where there is any difference or some topics are not available, then specifications 2022 shall be followed.

S. No.	Description	Unit	Rate in Rs.
1	Providing and laying 1:2:4 (1 lime 2 sand and 4 coarse aggregate) lime concrete using graded stone ballast 3 inches (76 mm) and down gauge in foundation including levelling, ramming and curing etc. complete.	100 Cft Cu.m.	20,091.35 7,095.20
2	Providing and laying 1:2:4 (1 lime 2, sand and 4 coarse aggregate) lime concrete using graded stone ballast 2 inches (51 mm) and down gauge in foundation including levelling, ramming and curing etc. complete.	100 Cft Cu.m.	20,396.93 7,203.12
3	Providing and laying 1:2:4 (1 lime 2 sand and 4 coarse aggregate) lime concrete using graded gravel(bajri) 1 inches (25 mm) and down gauge in foundation including levelling, ramming and curing etc. complete.	100 Cft Cu.m.	22,191.31 7,836.79
4	Providing and laying 1:2:8 (1 lime 2 sand 8 brick ballast lime concrete using graded jhama brick ballast 1-1/2 inches (38 mm) and down gauge in foundation including levelling, ramming and curing etc. complete.	100 Cft Cu.m.	19,888.50 7,023.56
5	Providing and laying 1:1:9 (1 lime 1 sand 9 brick ballast) lime concrete using graded jhama brick ballast 1-1/2 inches (38 mm) and down gauge in foundation including levelling, ramming and curing etc. complete.	100 Cft Cu.m.	18,725.32 6,612.79
6	Providing and laying 1:2:4 (1 cement 2 sand and 4 coarse aggregate) cement concrete using graded stone ballast 1 inches (25 mm) and down gauge in foundation including levelling, compacting and curing etc. complete.	100 Cft Cu.m.	29,393.44 10,380.20
7	Providing and laying 1:2:4 (1 cement 2 sand and 4 coarse aggregate) cement concrete using graded stone ballast 2 inches (51 mm) and down gauge in foundation including levelling, compacting and curing etc. complete.	100 Cft Cu.m.	29,079.13 10,269.21
8	Providing and laying 1:2:4 (1 cement 2 sand and 4 coarse aggregate) cement concrete using graded gravel (bajri) 1 inch (25 mm) and down gauge in foundation including levelling, compacting and curing etc. complete.	100 Cft Cu.m.	31,045.44 10,963.61
9	Providing and laying 1:3:6 (1 cement 3 sand and 6 coarse aggregate) cement concrete using graded stone ballast 1 inche (76 mm) and down gauge in foundation including levelling, compacting and curing etc.complete.	100 Cft Cu.m.	24,905.69 8,795.37

CONCRETE WORK IN FOUNDATION

SUB-HEAD CODE 105

S. No.	Description	Unit	Rate in Rs.
10	Providing and laying 1:3:6 (1 cement 3 sand and 6 coarse aggregate) cement concrete using graded stone ballast 2 inches (51 mm) and down gauge in foundation including levelling, compacting and curing etc. complete.	100 Cft	24,562.15
		Cu.m.	8,674.05
11	Providing and laying 1:3:6 (1 cement 3 sand and 6 coarse aggregate) cement concrete using graded gravel (bajri) 1 inch (25 mm) and down gauge in foundation including levelling, compacting and curing etc. complete.	100 Cft	26,412.35
		Cu.m.	9,327.44
12	Providing and laying 1:4:8 (1 cement 4 sand and 8 coarse aggregate) cement concrete using graded stone ballast 1 inches (25 mm) and down gauge in foundation including levelling, compacting and curing etc. complete.	100 Cft	22,137.65
		Cu.m.	7,817.85
13	Providing and laying 1:4:8 (1 cement 4 sand and 8 coarse aggregate) cement concrete using graded stone ballast 2 inches (51 mm) and down gauge in foundation including levelling, compacting and curing etc. complete.	100 Cft	21,744.25
		Cu.m.	7,678.92
14	Providing and laying 1:4:8 (1 cement 4 sand and 8 coarse aggregate) cement concrete using graded gavel (bajri) 1 inch (25 mm) and down gauge in foundation including levelling, compacting and curing etc.complete.	100 Cft	23,504.59
		Cu.m.	8,300.58
15	providing and laying 1:5:10 (1 cement 5 sand and 10 coarse aggregate) cement concrete using graded stone ballast 3 inches (76 mm) and down gauge in foundation including levelling, compacting and curing etc. complete.	100 Cft	19,220.93
		Cu.m.	6,787.81
16	Providing and laying 1:5:10 (1 cement 5 sand and 10 coarse aggregate) cement concrete using graded stone ballast 2 inches (51 mm) and down gauge in foundation including levelling, compacting and curing etc. complete.	100 Cft	19,839.40
		Cu.m.	7,006.22
17	Providing and laying 1:5:10 (1 cement 5 sand and 10 coarse aggregate) cement concrete using graded gravel (bajri) 1 inch (25 mm) and down gauge in foundation including levelling, compacting and curing etc. complete.	100 Cft	21,409.26
		Cu.m.	7,560.61
18	Providing and laying 1:6:12 (1 cement 6 sand and 12 coarse aggregate) cement concrete using graded stone ballast 3 inches (76 mm) and down gauge in foundation including levelling, compacting and curing etc. complete.	100 Cft	18,078.02
		Cu.m.	6,384.20
19	Providing and laying 1:6:12 (1 cement 6 sand and 12 coarse aggregate) cement concrete using graded stone ballast 2 inches (51 mm) and down gauge in foundation including levelling, compacting and curing etc. complete.	100 Cft	18,506.00
		Cu.m.	6,535.34

CONCRETE WORK IN FOUNDATION

SUB-HEAD CODE 105

S. No.	Description	Unit	Rate in Rs.
20	Providing and laying 1:6:12 (1 cement 6 sand and 12 coarse aggregate) cement concrete using graded gravel (bajri) 1 inch (25 mm) and down gauge in foundation including levelling, compacting and curing etc. complete.	100 Cft Cu.m.	20,176.35 7,125.22
21	Extra if crushed graded boulders (machine broken) are used in item Nos. 2 and 7.	100 Cft Cu.m.	1,348.50 476.22
22	Extra if crushed graded boulders (machine broken) are used in item No. 10.	100 Cft Cu.m.	1,457.00 514.54
23	Extra if crushed graded boulders (machine broken) are used in item No, 13.	100 Cft Cu.m.	1,472.50 520.01
24	Extra if crushed graded boulders (machine broken) are used in item No.19.	100 Cft Cu.m.	1,472.50 520.01
25	Extra if crushed graded boulders (machine broken) are used in item Nos. 3 and 8.	100 Cft Cu.m.	1,649.38 582.47
26	Extra if crushed graded boulders (machine broken) are used in item No. 11.	100 Cft Cu.m.	1,776.25 627.28
27	Extra if crushed graded boulders (machine broken) are used in item No. 14.	100 Cft Cu.m.	1,000.00 353.15
28	Extra if crushed graded boulders (machine broken) are used in item No. 17.	100 Cft Cu.m.	1,000.00 353.15
29	Extra if crushed graded boulders (machine broken) are used in item No. 20.	100 Cft Cu.m.	1,000.00 353.15
30	Extra if Lawrencepur sand is used in place of local sand at Lahore in item No.1, 2, 6, 7, and 9.	100 Cft Cu.m.	2,090.00 738.08
31	Extra if Lawrencepur sand is used in place of local sand at Lahore in item No. 3, 8. 10, 12, 15, and 18.	100 Cft Cu.m.	2,185.00 771.63
32	Extra if Lawrencepur sand is used in place of local sand at Lahore in item No. 4.	100 Cft Cu.m.	1,235.00 436.14
33	Extra if Lawrencepur sand is used in place of local sand at Lahore in item No. 5.	100 Cft Cu.m.	570.00 201.29
34	Extra if Lawrencepur sand is used in place of local sand at Lahore in item No. 11, 13. 14. 16. 17. 19 and 20	100 Cft Cu.m.	2,327.50 821.95
35	Extra if Lawrencepur sand is used in place of local sand at Rawalpindi in item No. 1, 2, 6, 7 and 9 .	100 Cft Cu.m.	385.00 135.96

CONCRETE WORK IN FOUNDATION
SUB-HEAD CODE 105

S. No.	Description	Unit	Rate in Rs.
36	Extra if Lawrencepur sand is used in place of local sand at Rawalpindi in item No. 4 .	100 Cft Cu.m.	227.50 80.34
37	Extra if Lawrencepur sand is used in place of local sand at Rawalpindi in item No. 5 .	100 Cft Cu.m.	105.00 37.08
38	Extra if Lawrencepur sand is used in place of local sand at Rawalpindi in item No. 3, 8, 10, 12, 15 and 18 .	100 Cft Cu.m.	322.00 113.71
39	Extra if Lawrencepur sand is used in place of local sand at Rawalpindi in item No. 11, 13, 14, 16, 17, 19 and 20 .	100 Cft Cu.m.	428.75 151.41
40	Extra if Lawrencepur sand is used in place of local sand at Peshawar in item No. 1, 2, 6, 7. and 9 .	100 Cft Cu.m.	715.00 252.50
41	Extra if Lawrencepur sand is used in place of local sand at Peshawar in item No. 4 .	100 Cft Cu.m.	422.50 149.20
42	Extra if Lawrencepur sand is used in place of local sand at Peshawar in the item No. 5 .	100 Cft Cu.m.	195.00 68.86
43	Extra if Lawrencepur sand is used in place of local sand at Peshawar in item No. 3, 8. 10, 12, 15 and 18 .	100 Cft Cu.m.	747.50 263.98
44	Extra if Lawrencepur sand is used in place of local sand at Peshawar in item No. 11,3, 14, 16, 17, 19 and 20 .	100 Cft Cu.m.	796.25 281.19
45	Deduct if jhama brick ballast is used in place of stone ballast in item Nos. 1 and 6 .	100 Cft Cu.m.	1,732.50 611.83
46	Deduct if jhama brick ballast is used in place of stone ballast in item Nos. 2 and 7 .	100 Cft Cu.m.	(2,024.00) (714.77)
47	Deduct if Jhama brick ballast is used in place of gravel in item Nos. 3 and 8	100 Cft Cu.m.	2,616.25 923.92
48	Deduct if stone ballast is used in place of Jhama brick in item Nos. 4 and 5 .	100 Cft Cu.m.	(2,677.50) (945.55)
49	Deduct if jhama brick ballast is used in place of stone ballast in item Nos. 9. 12, 15 and 18 .	100 Cft Cu.m.	1,876.88 662.81
50	Deduct if jhama brick ballast is used in place of stone ballast in item Nos. 10, 13, 16 and 19 .	100 Cft Cu.m.	(2,185.00) (771.63)
51	Deduct if jhama brick ballast is used in place of gravel in item Nos. 11, 14, 17 and 20 .	100 Cft Cu.m.	2,846.25 1,005.14

CONCRETE WORK IN FOUNDATION

SUB-HEAD CODE 105

S. No.	Description	Unit	Rate in Rs.
52	Providing and laying 1:2:3 (1 cement 2 sand and 3 bajri) cement concrete using graded screened bajri 3/4 inch (19 mm) and down gauge in foundation including levelling, compacting and curing etc. complete.	100 Cft	31,408.63
		Cu.m.	11,091.86
53	Providing and laying 1:1-1/2:3 (1 cement 1-1/2 sand and 3 bajri) cement concrete using graded screened bajri 3/4 inch (19 mm) and down gauge in foundation including levelling, compacting and curing etc. complete	100 Cft	33,081.75
		Cu.m.	11,682.72
54	Providing and laying 1:1:2 (1 cement 1 sand and 2 bajri) cement concrete using graded screened bajri 3/4 inch (19 mm) and down gauge in foundation including levellting. compacting and curing etc. complete.	100 Cft	40,662.11
		Cu.m.	14,359.70
55	Extra if crushed graded boulders of 3/4 inch (19 mm) and down gauge are used in item N,. 52 .	100 Cft	443.75
		Cu.m.	156.71
56	Extra if crushed graded boulders of 3/4 inch (19 mm) and down gauge are used in item No. 53 .	100 Cft	487.50
		Cu.m.	172.16
57	Extra if crushed graded boulders of 3/4 inch (19 mm) and down gauge are used in item No. 54 .	100 Cft	450.00
		Cu.m.	158.92
58	Providing and laying 1:12 (1 cement 12 screened bajri) cement concrete using 3/4 inch (19 mm) and down gauge screened bajri in foundation including levelling, compacting and etc. complete.	100 Cft	19,447.46
		Cu.m.	6,867.81
59	Providing and laying 1:9 (1 cement 9 screened bajri) cement concrete using 3/4 inch (19 mm) and down gauge screened bajri in foundation including levelling, compacting and curing etc. complete .	100 Cft	21,773.76
		Cu.m.	7,689.34
60	Providing and laying 1:6 (1 cement 6 screened bajri) cement concrete using 3/4 inch (19 mm) and down gauge screened bajri in foundation including levelling, compacting and curing etc. complete .	100 Cft	26,392.27
		Cu.m.	9,320.35
61	Providing and using water proofing agent like "cemto" or its approve equivalent .	lb.	257.50
		Grm.	0.57
62	Providing and using liquid water proofing agent like "cemcon" or its approved equivalent.	Galon	1,170.00
		Litre	257.36
63	Extra for and using sulphate resisting cement in place of ordinary portland cement.	Cwt.	237.50
		Kg.	4.67
64	Extra for and using Super sulphate cement in place of ordinary portland cement ..	Cwt.	237.50
		Kg.	4.67
65	Providing and using, in cement concrete, approved accelerating agent.	Galon	1,070.00
		Litre	235.37
66	Providing and using, in cement concrete, approved retarding agent.	Galon	2,482.50
		Litre	546.07
67	Providing and using, in cement concrete, approved wetting agent.	Galon	3,007.50
		Litre	661.56

C.C. CAST IN SITU IN FOUNDATION, BASEMENT AND PLINTH

Code 106

PAKISTAN PUBLIC WORKS DEPARTMENT

C.C. CAST IN SITU FOUNDATION, BASEMENT AND PLINTH

SUB-HEAD CODE 106

Note:

The Specification pertaining to cement concrete work as given and inserted at the introduction of Sub-Head No. 114 which also cover C.C Cast in situ in foundation,basement and plinth for plain. cement concrete work. Execution work shall be carried out as per above Specifications. Where there is any difference or some topics are not available, then specifications 2022 shall be followed.

S. No.	Description	Unit	Rate in Rs.
1	Providing and laying in situ 1:4:8 (1 cement 4 sand and 8 coarse aggregate) cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 R,m) depth and plinth up to 4 feet (1.2 R-m) height from ground level ..	100 Cft	31,755.93
		Cu.m.	11,214.51
2	Providing and laying in situ 1:3:6 (1 cement 3 sand and 6 coarse aggregate) cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work, etc. complete, foundation and basement up to 5 feet (1.52 R.m) depth and plinth up to 4 feet (1.2 R.m) height from ground level.	100 Cft	34,412.58
		Cu.m.	12,152.70
3	Providing and laying in situ 1:2-1/2:5 (1 cement 2-1/2 sand and 5 coarse aggregate) cement concrete using screened graded bajri 3/4 (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 R.m) depth and plinth up to 4 feet (1.2 R.m) height from ground level ..	100 Cft	36,109.79
		Cu.m.	12,752.06
4	Providing and laying in situ 1:3:3 (1 cement 3 sand and 3 coarse aggregate) cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including formwork, compacting, curing and removal of formwork etc. complete, foundation and basement up to 5 feet (1.52 R.m) depth and plinth up to 4 feet (1.2 R.m) height from ground level .	100 Cft	38,881.92
		Cu.m.	13,731.03
5	Providing and laying in situ 1:2:4 (1 cement 2 sand and 4 coarse aggregate) cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet depth (1.52 m) and plinth up to 4 feet (1.2 m) height from ground level .	100 Cft	38,612.20
		Cu.m.	13,635.78

C.C. CAST IN SITU FOUNDATION, BASEMENT AND PLINTH

SUB-HEAD CODE 106

S. No.	Description	Unit	Rate in Rs.
6	Providing and laying in situ 1:2:3 (1 cement 2 sand and 3 coarse aggregate) cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level .	100 Cft Cu.m.	40,702.88 14,374.10
7	Providing and laying in situ 1:1-1/2:3 (1 cement 1-1/2 sand and 3 coarse aggregate) cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level .	100 Cft Cu.m.	42,375.99 14,964.96
8	Providing and laying in situ 1:2:2 (1 cement 2 sand and 2 coarse aggregate) cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level .	100 Cft Cu.m.	43,560.98 15,383.43
9	Providing and laying in situ 1:1:2 (1 cement 1 sand and 2 coarse aggregate) cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level .	100 Cft Cu.m.	49,956.36 17,641.94
10	Providing and laying in situ 1:1-1/2 : 1-1/2 (1 cement 1-1/2 sand and 1-1/2 coarse aggregate) cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet f1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level .	100 Cft Cu.m.	50,291.08 17,760.14
11	Providing and laying in situ 1:4:8 (1 cement 4 sand and 8 coarse aggregate) cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level.	100 Cft Cu.m.	32,221.55 11,378.94
12	Providing and laying in situ 1:3:6 (1 cement 3 sand and 6 coarse aggregate) cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level .	100 Cft Cu.m.	34,857.58 12,309.85

C.C. CAST IN SITU FOUNDATION, BASEMENT AND PLINTH

SUB-HEAD CODE 106

S. No.	Description	Unit	Rate in Rs.
13	Providing and laying in situ 1:2-1/2:5 (1 cement 2-1/2 sand and 5 coarse aggregate) cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level.	100 Cft Cu.m.	36,644.30 12,940.83
14	Providing and laying in situ 1:3:3 (1 cement 3 sand and 3 coarse aggregate) cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level .	100 Cft Cu.m.	39,272.55 13,868.98
15	Providing and laying in situ 1:2:4 (1 cement 2 sand and 4 coarse aggregate) cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level .	100 Cft Cu.m.	39,059.08 13,793.60
16	Providing and laying in situ 1:2:3 (1 cement 2 sand and 3 coarse aggregate) cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level .	100 Cft Cu.m.	41,146.63 14,530.81
17	Providing and laying in situ 1:1-1/2:3 (1 cement 1-1/2 sand and 3 coarse aggregate) cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level .	100 Cft Cu.m.	43,613.49 15,401.97
18	Providing and laying in situ 1:2:2 (1 cement 2 sand and 2 coarse aggregate) cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level .	100 Cft Cu.m.	43,798.48 15,467.30
19	Providing and laying in situ 1:1:2 (1 cement 1 sand and 2 coarse aggregate) cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level .	100 Cft Cu.m.	50,406.36 17,800.86

C.C. CAST IN SITU FOUNDATION, BASEMENT AND PLINTH

SUB-HEAD CODE 106

S. No.	Description	Unit	Rate in Rs.
20	Providing and laying in situ 1:1-1/2:1-1/2 (1 cement 1-1/2 sand and 1-1/2 coarse aggregate) cement concrete using crushed graded boulders 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level .	100 Cft Cu.m.	50,632.32 17,880.65
21	Providing and laying in situ 1:9 (1 cement 9 all in aggregate) cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level.	100 Cft Cu.m.	31,062.51 10,969.63
22	Providing and laying in situ 1:8 (1 cement 8 all in aggregate) cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level.	100 Cft Cu.m.	32,154.67 11,355.32
23	Providing and laying in situ 1:7 (1 cement 7 all in aggregate) cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level.	100 Cft Cu.m.	33,698.19 11,900.41
24	Providing and laying in situ 1:6 (1 cement 6 all in aggregate) cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level.	100 Cft Cu.m.	35,686.52 12,602.59
25	Providing and laying in situ 1:5 (1 cement 5 all in aggregate) cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level.	100 Cft Cu.m.	38,465.81 13,584.09
26	Providing and laying in situ 1:4 (1 cement 4 all in aggregate) cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level.	100 Cft Cu.m.	42,640.71 15,058.44

C.C. CAST IN SITU FOUNDATION, BASEMENT AND PLINTH

SUB-HEAD CODE 106

S. No.	Description	Unit	Rate in Rs.
27	Providing and laying in situ 1:3 (1 cement 3 all in aggregate) cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in foundation,- basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level.	100 Cft Cu.m.	49,429.56 17,455.90
28	Extra for using 50 % crushed graded boulders 3/4 inch (19 mm) and down gauge and 50 % graded screened bajri 3/4 inch (19 mm) and down gauge in place of hundred percent bajri in item No. 1.	100 Cft Cu.m.	200.00 70.63
29	Extra for using 50 % crushed graded boulders 3/4 inch (19 mm) and down gauge and 50 % graded screened bajri 3/4 inch (19 mm) and down gauge in place of hundred percent bajri in item No. 2.	100 Cft Cu.m.	200.00 70.63
30	Extra for using 50% crushed graded boulders 3/4 inch (19 mm) and down gauge and 50 % graded screened bajri 3/4 inch (19 mm) and down gauge in place of hundred percent bajri in item No. 3.	100 Cft Cu.m.	200.00 70.63
31	Extra for using 50 % crushed graded boulders 3/4 inch (19 mm) and down gauge and 50 % graded screened bajri 3/4 inch (19 mm) and down gauge in place of hundred percent bajri in item No. 4.	100 Cft Cu.m.	200.00 70.63
32	Extra for using 50 % crushed graded boulders 3/4 inch (19 mm) and down gauge and 50 % graded screened bajri 3/4 inch (19 mm) and down gauge in place of hundred percent bajri in item No. 5.	100 Cft Cu.m.	259.38 91.60
33	Extra for using 50 % crushed graded boulders 3/4 inch (19 mm) and down gauge and 50 % graded screened bajri 3/4 inch (19 mm) and down gauge in place of hundred percent bajri in item No. 6.	100 Cft Cu.m.	221.88 78.35
34	Extra for using 50 % crushed graded boulders 3/4 inch (19 mm) and down gauge and 50 % graded screened bajri 3/4 inch (19 mm) and down gauge in place of hundred percent bajri in item No. 7	100 Cft Cu.m.	243.75 86.08
35	Extra for using 50 % crushed graded boulders 3/4 inch (19 mm) and down gauge and 50 % graded screened bajri 3/4 inch (19 mm) and down gauge in place of hundred percent bajri in item No. 8.	100 Cft Cu.m.	175.00 61.80
36	Extra for using 50 % crushed graded boulders 3/4 inch (19 mm) and down gauge and 50 % graded screened bajri 3/4 inch (19 mm) and down gauge in place of hundred percent bajri in item No. 9.	100 Cft Cu.m.	225.00 79.46
37	Extra for using 50 % crushed graded boulders 3/4 inch (19 mm) and down gauge and 50 % graded screened bajri 3/4 inch (19 mm) and down gauge in place of hundred percent bajri in item No. 10.	100 Cft Cu.m.	171.88 60.70

C.C. CAST IN SITU FOUNDATION, BASEMENT AND PLINTH

SUB-HEAD CODE 106

S. No.	Description	Unit	Rate in Rs.
38	Providing and laying in situ plum concrete 1:4:8 (1 cement 4 sand and 8 coarse aggregate) using 85% graded bajri 3/4 inch (19 mm) and down gauge and 15% boulders 9 inches (229 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level .	100 Cft Cu.m.	31,131.55 10,994.01
39	Providing and laying in situ plum concrete 1:3:6 (1 cement 3 sand and 6 coarse aggregate) using 85% graded bajri 3/4 inch (19 mm) and down gauge and 15% boulders 9 inches (229 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level.	100 Cft Cu.m.	33,836.33 11,949.20
40	Providing and laying in situ plum concrete 1:2:4 (1 cement 2 sand and 4 coarse aggregate) using 85% graded bajri 3/4 inch (19 mm) and down gauge and 15% boulders 9 inches (229 mm) and down gauge in foundation, basement and plinth including form work, compacting, curing and removal of form work etc. complete, foundation and basement up to 5 feet (1.52 m) depth and plinth up to 4 feet (1.2 m) height from ground level.	100 Cft Cu.m.	38,111.58 13,458.99
41	Extra using 50% crushed graded boulders 3/4 inch (19 mm) and down gauge and 50% graded screened bajri 3/4 inch (19 mm) and down gauge in place of only bajri in item No. 38.	100 Cft Cu.m.	237.50 83.87
42	Extra using 50% crushed graded boulders 3/4 inch (19 mm) and down gauge and 50% graded screened bajri 3/4 inch (19 mm) and down gauge in place of only bajri in item No. 39 .	100 Cft Cu.m.	234.38 82.77
43	Extra using 50% crushed graded boulders 3/4 inch (19 mm) and down gauge and 50% graded screened bajri 3/4 inch (19 mm) and down gauge in place of only bajri in item No. 40.	100 Cft Cu.m.	218.75 77.25
44	Extra if Lawrencepur sand is used in place of local sand at Lahore in item Nos. 1,2,3,11,12,13,38 and 39.	100 Cft Cu.m.	2,090.00 738.08
45	Extra if Lawrencepur sand is used in place of local sand at Lahore in item Nos. 4 and 14 .	100 Cft Cu.m.	3,040.00 1,073.57
46	Extra if Lawrencepur sand is used in place of local sand at Lahore in item Nos. 5,15 & 40.	100 Cft Cu.m.	1,947.50 687.75
47	Extra if Lawrencepur sand is used in place of local sand at Lahore in item Nos. 6 and 16 .	100 Cft Cu.m.	2,280.00 805.18
48	Extra if Lawrencepur sand is used in place of local sand at Lahore in item Nos. 7,9,17 and 19 .	100 Cft Cu.m.	1,757.50 620.66
49	Extra if Lawrencepur sand is used in place of local sand at Lahore in item Nos. 8,10,18 and 20.	100 Cft Cu.m.	2,660.00 939.37

C.C. CAST IN SITU FOUNDATION, BASEMENT AND PLINTH

SUB-HEAD CODE 106

S. No.	Description	Unit	Rate in Rs.
50	Extra if Lawrencepur sand is used in place of local sand at Rawalpindi in item Nos. 1,2,3,11.12,13,38 and 39.	100 Cft Cu.m.	385.00 135.96
51	Extra if Lawrencepur sand is used in place of local sand at Rawalpindi in item Nos. 4 and 14 .	100 Cft Cu.m.	560.00 197.76
52	Extra if Lawrencepur sand is used in place of local sand at Rawalpindi in item Nos. 5,15 & 40.	100 Cft Cu.m.	358.75 126.69
53	Extra if Lawrencepur sand is used in place of local sand at Rawalpindi in item Nos. 6 and 16 ..	100 Cft Cu.m.	84.00 29.66
54	Extra if Lawrencepur sand is used in place of local sand at Rawalpindi in item Nos. 7,9,17 and 19 .	100 Cft Cu.m.	64.75 22.87
55	Extra if Lawrencepur sand is used in place of local sand at Rawalpindi in item Nos. 8,10,18 and 20 .	100 Cft Cu.m.	98.00 34.61
56	Extra if Lawrencepur sand is used in place of local sand at Peshawar in item Nos. 1,2,3,11,12,13.38 and 39.	100 Cft Cu.m.	143.00 50.50
57	Extra if Lawrencepur sand is used in place of local sand at Peshawar in item Nos. 4 and 14 .	100 Cft Cu.m.	208.00 73.45
58	Extra if lawrencepur sand is used in place of local sand at Peshawar in item Nos. 5,15 and 40.,	100 Cft Cu.m.	133.25 47.06
59	Extra if lawrencepur sand is used in place of local sand at Peshawar in item Nos. 6 and 16 .	100 Cft Cu.m.	780.00 275.45
60	Extra if lawrencepur sand is used in place of local sand at Peshawar in item Nos. 7,9,17 and 19 .	100 Cft Cu.m.	1,480.00 522.66
61	Extra if lawrencepur sand is used in place of local sand at Peshawar in item Nos. 8,10,18 and 20 .	100 Cft Cu.m.	893.75 315.63
62	Providing and using water proofing agent like 'CEMTO' or its approved equivalent ..	Lbs. 100 Gram	252.00 55.56
63	Extra for using liquid water proofing agent like 'cemcon' or its approved equivalent ..	Im.gl. Litre	1,164.50 257.06
64	Extra for using sulphate resisting cement in place of ordinary portland cement ..	Cwt Kg.	237.50 4.67
65	Extra for using super sulphate cement in place of portland cement.	Cwt Kg.	237.50 4.67
66	Providing and using in cement concrete approved accelerating agent .	Im.gl. Litre	1,062.50 233.72
67	Providing and using in cement concrete any approved retarding agent .	Im.gl. Litre	2,479.50 545.41
68	Providing and using in cement concrete approved wetting agent .	Im.gl. Litre	3,004.50 660.90

PILE FOUNDATIONS

Code 107

PILES AND PILE DRIVING (SH-107)

Brief Specification

GENERAL:

Timber piles are generally 10 to 12 feet long, 9 to 12" wide and 3" thick. They are made of 3 planks of 1" thickness and bolted together to make a tongue and groove sheetings or cut from a single plank, and are driven along guide piles which are driven first at intervals of 6 to 10 feet.

The advantages of steel sheet-piling over other forms of piling are that the section of the pile gives greater strength for the same weight and permits them to be driven and easily extracted. But steel sheet-piling is liable to deteriorate owing to the formation of rust. The average rate of corrosion per year is considered 0.003 inch in sea water and 0.002 inch in fresh water. A protective coating of tar or some similar anticorrosive paint should be applied periodically.

TYPES OF PILES :

In foundation two types of piles are used: bearing piles and friction piles.

BEARING PILES

These piles are driven through soft strata and go deep to rest on hard surface and support the load by the resistance developed at their points by end-bearing, and act as long column, the effective length of which is considered from 1/3 to 2/3 of the length in ground plus the length projecting above ground. The proportion (1/3 to 2/3) taken depends upon the firmness of the surrounding strata. In no case should the effective length be less than the projecting length plus 5 feet.

FRICTION PILES:

They are driven into hard strata. The load carrying capacity of the single pile depends upon the surface area of the pile. For the same superficial area of the pile surface, a few long piles are more efficient than many short piles.

The surface area of the pile multiplied by the frictional resistance gives the load which a friction pile would normally carry.

TIMBER PILES:

Timber piles are durable in permanently wet or permanently dry positions but not where they are alternately wet and dry or where the moisture content is widely variable. Timber piles should be impregnated with solignum, creosote or some such preservative. Preservative treatment may not be necessary for piles which are to be completely and permanently submerged in a water-logged ground in which case seasoning is not required and piles may be stored in water prior to use. Pakistan timbers suitable for piles are: Sal billi, Deodar, Babool & Pine.

Timber piles are generally 6 to 16 inches (or even upto 18 inches) in diameter or square in section. Their length is not greater than 20 times the diameter (or width) at the top. They either taper throughout the length or the upper half is kept straight and the lower half tapers off to about 6 inches square size. The bottom is shaped conically for a length of from 1-1/2 to 2 times the diameter or about 1 foot 6 inches, and where the ground is hard it is protected with an iron shoe of V-shape. Usual spacing of timber plies is 2-1/4 feet to 2-1/2 feet. Piles are considered to be sufficiently driven when five blows fail to more than half an inch; or when the last below does not sink the head more than quarter of an inch.

PRECAST CONCRE PILES:

Pre cast concrete pile may be divided into two kinds; tapered and parallel sided. They are usually square, octagonal or hexagonal section since they are easier to cast than the round section. Square piles are most commonly used because they are easy to mould and convenient to drive. The usual size is 6 to 24 inches, but piles have been made up to 36 inches size with cylindrical holes inside. For piles larger than 16 inches X 16 inches an octagonal section is preferable to a square section.

The maximum lengths of piles are usually 40 feet for 12 inches square,40 to 50 feet for 14 inches square , 50 to 60 feet for 16 inches square, and 60 to 70 feet for 18 inches square. It is preferable to keep the lengths less and 40 times the side width for friction piles and less than 20 times the side width for bearing piles ,Where the piles are to act as columns, the maximum ;load allowed for concrete is 600 Ibs/square inch and for steel 9,000 ibs./square ihch. Concrete piles should be cured for at for at least one month

REINFORCEMENT FOR CONCRETE PILES:

The area of the main longitudinal reinforcement may be 1-1/2 percent of the gross cross-sectional area of the pile for of lengths up to30 times their least width and 2 percent for lengths 30 to 40 times least width this may be increased to 3 percent for longer lengths:

One rod is provided at each corner in square piles, and one rod at each angle of octagonal or hexagonal piles .All main longitudinal bars should be of the same length and level at the top and should fit tightly into the pile shoe following the taper of the shoes. Joint in longitudinal bars if unavoidable, should be made by butt welding or as directed by the Engineer -in charge .Transverse reinforcement should be provided in the form of hooks or links of not made by butt welding or as directed bars, whichever is greater, spaced not less than 3 /16 inch diameter, or one-quarter the diameter of the main bars, whichever is greater, and the quantity should not be less than o.4 percent of the gross concrete volume, spaced not more than half the least width of the pile .The cover overall reinforcement, including binding wire, should not be less than 1-1/2 inches of concrete. but where the piles are exposed to sea water or other corrosive influence, the cover should not be less than two inches at any place.

Reinforced concrete piles should be 1:1/2;1-1/2:or richer mix with well-graded aggregate of maximum size limited to ½ inch and a slump of about 1-1/2 inch

CAST-IN SITU PIES:

These piles are made by driving hollow tubes or heavy steel pipe casings and then withdrawing them or by boring and filling the holes formed with concrete. Such piles can be used for lengths up to 70 to 80 feet. There are many patented process for these piles such as. Franki, simplex Vibro.No driving pile should be withdrawn till all the piles within 10 feet radius have been driven.

RAKING PILS:

The raking piles are driving to take eccentric loads, and are generally, in addition to the vertical piles. They can be driven to batter as great as 1 in 4, but on a larger batter, these are difficult to drive as the batter tends to increase .Bearing value of these piles is reduced by about 1 to 6 percent.

DRIVING PILES

GENERAL:

The top of a pile must be cut square so that impact of the hammer is distributed uniformly, and the pile is driven truly vertical. Where a pile has been driven out of alignment, its head should not be forced back into line unless the ground around the pile (in the direction of the pull) has been first excavated.

PILE HAMMERS

Pile hammers fall into three main categories (i) Drop Hammers (ii) Single Acting Hammers and (iii) Double Acting Hammers.

SINKING PILES WITH THE HELP OF WATER JET

Pile driving is sometimes very much facilitated by using water jet. A jet pipe having diameter of net less than 2" is taken down by the side of the pile and the pile is kept working up and down as required.

PILE DRIVING :

Piles shall be driven by means of a steam hammer or an air hammer of a size and type suitable for the work. As approved by the Engineer –I –charge . The weight of the moving parts of the hammer shall not be less than 8,000 pound, unless otherwise authorized by the Engineer –in–charge The hammer shall be operated at all times at the steam or air pressure and at the speed recommended by the manufacture .The hammer must reach to drive continuously and without voluntary interruption till the required depth of penetration has been attained. Where water jetting is authorized, the jetting equipment shall be of a type and capacity approved by the Engineer –in –charge . The lowest 3 feet shall however, be always driven without jetting.

CAUSHIONSF FOR PIL HEAD:

In order to avoid the impact of blows which may damage the top of the piles, cushions of the must be provided for the piles.

EXTRANCTING PILES :

The piles be pulled out should be kept lubricated with water in order to reduce friction of the soil .The .The pulling force is calculated from the frictional resistance of the soil.

MAKING FOUNDATIONS OVER PILES(CAPPTING)

The piles tops should be extended into foundation of the structure for 6 to 9 inches and embedded in concrete, or a space 6 to 12 inches below the top of the piles and 1 foot outside the piles is excavated and concrete placed around and above the piles. Steel rods are left protruding over the top of the pile to be embedded subsequently in the foundations.

TEST PILES

GENETRAL:

These pies should be of the same material and dimensions as the working piles and driven with the same type of plant.

These piles should ordinarily be not less than 20 feet long. Necessary observation to determine the supporting capacity of the piles should be made while they are being driven.

PILE GROUPS:

The load carrying capacity of a group of piles is not always the multiple of the capacity of a single pile In soils which are compressed by piles and have deep deposits of fairly uniform consistency, the computation of pressure should be made on the assumption that the load is spread uniformly at the bottom of the piles for a distance of 0.58 times the length of the pile. Pile must have a clear equal to two diameters of the piles between them in all direction.

TESTING PIES FOR LOADS:

Ordinarily one- third of the total pies on an area should be tested, but their number should not be less than two pies for the entire site. The final load should be allowed to remain for at least 48 hours after there is no settlement and it should not exceed 0.oo1ft in 48 hours.

SPACING OF PIES:

The minimum spacing should not be less than 2 feet 6 inches to center or twice the least width of the pies, whichever is greater and 3 ft. Spacing should be aimed at. Friction pies should have spacing less than 3 feet 6 inches or the perimeter of the pies, whichever is greater. For heavy piles the maximum spacing form 5 ft to 7 ft. 6 inches.

MEASUREMENTS:

The length of the piles driven and installed below the cu-off elevation in accordance with the approved drawing and specification or as directed by the Engineer-measurement shall be one liner foot measured the axis of the pile, unless otherwise specified..

PAKISTAN PUBLIC WORKS DEPARTMENT

PILE FOUNDATION
SUB-HEAD CODE 107

S. No.	Description	Unit	Rate in Rs.
1	Cost in place piles upto 1.00 Meter dia in Normal Soil (Boring only)	Per Rft Per RM	2,094.35 6,871.55
2	Cost in place piles upto 1.00 Meter dia in General Strata (Boring only)	Per Rft Per RM	3,134.82 10,285.34
3	Cost in place piles 1.1-1.5 meter dia in Normal Soil (Boring only)	Per Rft Per RM	4,351.92 14,278.66
4	Cost in place piles 1.1-1.5 meter dia in General Strata (Boring only)	Per Rft Per RM	7,135.41 23,411.27
5	Cost in place piles 1-6 M -2.0 M dia in Normal Soil(Boring only)	Per Rft Per RM	5,975.93 19,607.02
6	Cost in place piles 1-6 M -2.0 M dia in General Soil(Boring only)	Each	10,616.67 34,833.30
7	Pile load test upto 120 Ton	Each	479,191.25
8	Pile load test upto 240 Ton	Each	731,856.25
9	Pile load test upto 360 Ton	Each	1,145,737.50
10	Pile load test upto 550 Ton	Each	1,746,787.50
11	Pile load test upto 800Ton	Each	2,679,662.50
12	Confirmatory Boaring (NX Size)	Rft	1,579.17 5,181.27
13	Permanent pile casing for piles	Per Ton	394,710.42
14	Execution of standard sub-soil penetration test at specified depth as required .	Each	600.00
15	Extraction of undisturbed sample of soil at specified depth and preserving separately in sampling tubes, wooden boxes and glass jars, properly sealed as required complete .	Each	1,500.00
16	Extraction of disturbed sample of soil at specified depth and preserving separately in sampling tubes, wooden boxes and glass jars, properly sealed as required complete .	Each	300.00
17	Extraction of water sample at specified depth and preserving separately in sampling tubes, and glass jars, properly sealed as required complete.	Each	1,200.00
18	Grain analysis' laboratory test including transportation of samples from site to laboratory .	Each	600.00
19	Sieve analysis' laboratory test including transportation of samples from site to laboratory .	Each	600.00
20	Hydrometer analysis' laboratory test including transportation of samples from site to laboratory .	Each	600.00
21	Specific gravity' laboratory test including transportation of samples from site to laboratory .	Each	900.00
22	Triaxial compression' laboratory test including transportation of samples from site to laboratory .	Each	1,200.00
23	Consolidation' laboratory test including transportation of samples from site to laboratory .	Each	3,000.00

PILE FOUNDATION
SUB-HEAD CODE 107

S. No.	Description	Unit	Rate in Rs.
24	Unconfined compression' laboratory test including transportation of samples from site to laboratory .	Each	1,200.00
25	Shear' laboratory test including transportation of samples from site to laboratory .	Each	3,000.00
26	Moisture contents' laboratory test including transportation of samples from site to laboratory .	Each	450.00
27	Atterberg limits' laboratory test including transportation of samples from site to laboratory .	Each	1,200.00
28	Chemical analysis of water' laboratory test including transportation of samples from site to laboratory .	Each	1,350.00
29	Submission of prints in triplicate of final sub-soil investigation report for one bore hole including geological cross section, field and laboratory tests, graphs, charts and calculations etc. complete with soil bearing capacity and recommendation of safe and economical type of foundation .	Each	4,500.00
30	Extra for submission of prints in triplicate for every additional bore hole over item 18 .	Each	2,250.00
31	Providing and laying RCC cast in situ piles of adequate size and of approved depth in foundation in all kinds of soils to bear a safe load of 40 to 50 tons (41 to 51 m.t) per pile using crushed graded boulders 3/4 inch (19 mm) and down gauge in dense homogeneous concrete mix not leaner than 1:1-1/2:3 having preliminary cube crushing strength of 5000 Lbs. per square inch (34.5 N/MM2) at 28 days, as per design, disposal of excavated material and bailing out water but excluding the cost of reinforcement (the actual length of pile in place measured from the soffit of pile cap will be accounted for and the soil investigation report shall be supplied by the department free of cost).	Cft Cum	1,552.40 54,822.69
32	Providing and laying RCC cast in situ piles of adequate size and of approved depth in foundation in all kinds of soils to bear a safe load of 60 to 70 tons (61 to 71 m.t) per pile using crushed graded boulders 3/4 inch (19 mm) of 5,000 Lbs. in dense homogenous concrete mix not leaner than 1:1-1/2:3 having preliminary cube crushing strength of 5,000 Lbs.per square inch (34.5 N/MM2) at 28 days, as per design, disposal of excavated material and bailing out water but excluding the cost of reinforcement (the actual length of pile in place measured from the soffit of pile cap will be accounted for and the soil investigation report shall be supplies by the department free of cost).	Cft Cum	1,601.33 56,550.38
33	Providing and laying RCC cast in situ piles of adequate size and of approved depth in foundation in all kinds of soils to bear a safe load of 80 to 90 tons (81 to 91 m.t) per pile using crushed graded boulders 3/4 inch (19 mm) and down gauge in dense homogeneous concrete mix not leaner than 1:1-1/2:3 having preliminary cube crushing out water excluding the cost of reinforcement (the actual length of pile in place measured from the soffit of pile cap will be accounted for and the soil investigation report shall be supplied by the department free of cost) .	Cft Cum	2,006.26 6,582.21

PILE FOUNDATION
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S. No.	Description	Unit	Rate in Rs.
34	Providing and laying RCC cast in situ piles of adequate size and of approved depth in foundation in all kinds of soils to bear a safe load of 100 to 120 tons (102 to 122 m.t) per pile using crushed graded boulders 3/4 inch (19 mm) and down gauge in dense homogeneous concrete mix not leaner than 1: 1-1/2:3 having preliminary cube crushing strength of 5000 Lbs. per square inch (34.5 N/MM2) at 28 days, as per design, disposal of excavated material and bailing out water but excluding the cost of reinforcement (the actual length of pile in place measured from the soffit of pile cap will be accounted for and the soil investigation report shall be supplies by the department. free of cost).	Cft Cum	2,504.63 8,217.28
35	Extra if franki type pile (with enlarged base/bulb of required size) is used in item No. 20 .	Rft. Ru.m.	849.64 2,787.53
36	Extra if franki type pile (with enlarged base/bulb of required size) is used in item No. 21 .	Rft. Ru.m.	928.05 3,044.77
37	Extra if franki type pile (with. enlarged base/bulb of required size) is used in item No. 22 .	Rft. Ru.m.	568.48 1,865.08
38	Extra if franki type pile (with enlarged base/bulb of required size) is used in item No. 23 .	Rft. Ru.m.	710.44 2,330.83
39	Providing and laying RCC precast piles of required size with chamfered corners using crushed graded boulders 3/4 inch (19 mm) and down gauge in dense homogeneous concrete mix not leaner than 1:1-1/2:3 having preliminary cube crushing strength of 5,000 Lbs- per square inch (34.5 N/MM2) at 28 days, form work and its removal, compaction, vibration, curing, stacking at site etc- complete but excluding the cost of reinforcement .	Cft Cu.m.	3,710.80 131,045.74
40	Providing and fixing cast iron pile shoe for RCC piles with necessary approved fittings .	lbs. kg.	120.63 265.93
41	Providing and fixing cast iron pile shoe for RCC timber piles wrth necessary approved fittings ..	lbs. Kg.	152.44 336.08
42	Driving of RCC precast piles of any size vertically up to 30 feet (9.15 r.m) depth from ground level with specified penetration or set as per designed load capacity in all kinds of soils except rock including cost of handling and pitching the etc. complete .	Rft. Ru.m.	653.33 2,143.48
43	Extra for driving of precast RCC piles to depth greater than 30 feet (9.15 m) below ground level for every additional foot over item No. 31.	Rft. Ru.m.	321.75 1,055.61
44	Cutting off top of reinforced cement concrete piles of any size including chiselling, dismantling, straightening the steel and disposal of dismantled stuff, etc..complete as directed .	Each	267.75
		Each	267.75

PILE FOUNDATION
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S. No.	Description	Unit	Rate in Rs.
45	Driving of RCC precast piles of any size to specified inclination and depth up to 30 feet (9.15 m) from ground level with specified penetration or set as per designed load capacity in all kind of soils, except rock including cost of handling cost of handling and pitching the pile to position etc. complete (actual pile length to be measured).	Rft. Ru.m.	671.57 2,203.32
46	Extra for using sulphate resisting cement instead of ordinary cement in mix 1:1-1/2:3 in RCC pile work, over item 31 to 34.	100 Cft Cu.m.	1,350.00 476.75
47	Extra if 1:1:2 (1 cement, 1 sand and 2 crushed graded boulders) is used in item No. 31 to 34 .	100 Cft Cu.m.	7,583.35 2,678.04
48	Extra for using sulphate resisting cement instead of ordinary cement in the mix 1:1:2 in RCC pile work, over item No. 39.	100 Cft Cu.m.	1,875.00 662.15
49	Deduct if shingle is used instead of crushed graded boulder in 1:1;2 in piles and caps etc. over item 39 .	100 Cft Cu.m.	2,152.50 760.15
50	Deduct if shingle is used instead of crushed graded boulders in 1:1-1/2:3 in piles and caps etc. over items 31 to 34.	100 Cft Cu.m.	2,180.00 769.86
51	Extra if Lawencepur sand is used in 1:1-1/2:3 in piles and cap etc. at Lahore, over items 31 to 34 .	100 Cft Cu.m.	1,852.50 654.20
52	Extra if Lawrencepur sand is used in 1:1-1/2:3 in piles and caps etc. at Rawalpindi, over items 31 to 34 .	100 Cft Cu.m.	341.25 120.51
53	Extra if Lawrencepur sand is used in 1:1-1/2:3 in piles and caps etc. at Peshawar, over items 31 to 34 .	100 Cft Cu.m.	633.75 223.81
54	Extra if Lawrencepur sand is used in 1:1:2 in piles and caps etc. at Lahore, over items 39 .	100 Cft Cu.m.	1,710.00 603.88
55	Extra if Lawrencepur sand is used in 1:1:2 in piles and caps etc. at Rawalpindi, over item 39 .	100 Cft Cu.m.	315.00 111.24
56	Extra if Lawrencepur sand is used in 1:1:2 in piles and caps etc. at Peshawar, over items 39 .	100 Cft Cu.m.	585.00 206.59
57	Providing and laying mild steel reinforcement deformed bars with and including the cost of straightening, removing twists, cutting, bending, binding, welding, wastage, overlaps as are not shown in drawings and placing the steel in position, tying with binding wire complete including cost of binding wire and cement concrete 1:2:4 precast chairs, or M.S chairs: for cast in situ RCC piles .	Cwt. 50 kg.	15,482.39 15,237.88

PILE FOUNDATION
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S. No.	Description	Unit	Rate in Rs.
58	Providing and laying mild steel reinforcement deformed bars with and including the cost of straightening, removing twists, cutting, bending, binding, welding wastage, overlaps as are not shown in drawings and placing the steel in position, typing with binding wire complete including cost of binding wire and cement concrete 1:2:4 precast chairs, or M.S. chairs: for piles caps, grade beams & precast piles .	Cwt. 50 kg.	12,950.39 12,745.87
59	Providing and laying hard grade (minimum yield point 60,000 per square inch) reinforcement bars and including the cost of straightening, removing twists, cutting, bending, binding, welding, wastage, overlaps, as are not shown in drawings, and placing the steel in position, tying with binding wire and cement concrete 1:2:4 precast or M.S. chairs; for cast in situ RCC piles.	Cwt. 50 kg.	16,507.39 16,246.70
60	Providing and laying hard grade steel (minimum yield point 60,000 per square inch) reinforcement bars and cutting the cost of straightening, removing twists, cutting, bending,. binding, welding wastage, overlaps, as are not shown in drawings and placing thesteel in position, tying wtth binding wire and cement concrete 1:2:4 precast of M.S. chairs: for pile caps.grade beams and precast piles.	Cwt. 50 kg.	13,750.53 13,533.37
61	Extra over item No. 31 driving precast RCC vertical piles in tidal water.	Rft. Ru.m.	672.78 2,207.29
62	Extra over item No, 34 driving precast RCC inclined piles in tidal water.	Rft. Ru.m.	787.09 2,582.32
63	Extra over item No. 31 driving precast RCC vertical piles in non-tidal water from pontoons or barges .	Rft. Ru.m.	336.45 1,103.85
64	Extra over rtem No. 34 for driving precast RCC inclined piles in non-tidal water from pontoons or barges .	Rft. Ru.m.	389.13 1,276.67
65	Extra over item No. 31 for driving precast RCC vertical piles in tidal water in pontoon barges are used .	Rft. Ru.m.	336.45 1,103.85
66	Extra over item No. 34 for driving inclined precast RCC piles in tidal water if pontoon barges are used .	Rft. Ru.m.	507.15 1,663.88
67	Extra RCC piles up to 18 inches (457 mm) dia in all kinds of soil.	Rft. Ru.m.	150.00 492.13
68	Extracting timber piles up to 12 inches (305 mm) dia in all kinds of soil.	Rft. Ru.m.	60.00 196.85
69	Providing balli piles of approved size and length size and length including cutting end to required shape and stacking at site etc. complete .	Cft Cu.m.	24,283.58 857,567.30
70	Driving of balli piles of section up to 12 inches x 12 inches (305 mm x 305 mm) and up to a depth of 20 feet. (6.1 m) from ground level with specified penetration in all kinds of soil except rock including cost of handling and pitching the piles etc. complete .	Rft. Ru.m.	467.25 1,532.97
71	Cutting of heads of ballis piies up to any section to required level & disposal of rubbish etc. complete .	Each Each	175.50 175.50

PILE FOUNDATION
SUB-HEAD CODE 107

S. No.	Description	Unit	Rate in Rs.
72	Testing, for design purpose, of RCC piles under static loading in standard approved manner including providing platform and its removal from site after test loading with sand bags and its unloading, measuring the settlement of pile and preparing charts etc. complete .	1 Job 1 Job	120,000.00 120,000.00
73	Testing of already driven working RCC piles under static loading in standard approved manner including providing platform and its removal from site after test loading with sand bags and its unloading, measuring the settlement of pile and preparing charts etc. complete .	Each Each	45,000.00 45,000.00
74	Testing balli piles under static loading in standard approved manner including providing platform and its removal from site after test, loading with sand bags and its unloading, measuring the settlement of piles and preparing charts etc. complete .	Ton Tonne	2,178.35 2,213.20
75	Providing and laying RCC in pile caps tie beams and grade beams of approved design using crushed graded boulders 3/4 inch (19 mm) and down gauge in dense homogeneous concrete mix not leaner than 1:1-1/2:3 to produce works cube crushing strength of 3750 Lbs. per square inch (25.0 N/MM2) at 28 days including form work and its removal, compacting, curing etc. and bailing out or pumping out sub-soil water during concreting etc. but excluding the cost of reinforcement.	100 Cft Cu.m.	50,678.63 17,897.01
76	Providing and laying RCC in pile caps beams tie and grade beams of approved design using crushed graded boulders 3/4 inch (19 mm) and down gauge in dense homogeneous concrete mix not leaner than 1:2:4 to produce works cube crushing strength of 3,000 Lbs. per square inch (20.7 N/MM2) at 28 days including form work and its removal, compacting, curing etc. but excluding the cost of reinforcement..	100 Cft Cu.m.	39,900.09 14,090.60

DAMP PROOF COURSE AND WATER PROOFING ROOFS

Code 108

DAMP PROOF COURSES AND WATER PROOFING OF ROOFS (SH-108)

Brief Specifications

Cement Concrete (D.P.C):-

i) The horizontal damp proof courses generally comprise of a dense cement concrete layer with 2" inches / 50 m.m. thickness topped over by a surface treatment of bitumen applied neat or a bitumen felt or thick polyethylene, or P.v.c. sheets.

ii) The cement concrete for the damp-proof courses shall be in proportion as specified in the item of work. Additives for damp proofing like pudlo etc shall be used in the proportions as given in the schedule of quantities.

iii) Concrete after placing and during the first three days of hardening shall be kept thoroughly wet by approved means approximately for a period of 10 days after placing the concrete.

iv) 80/100 bitumen shall be applied @ 35 Ibs per 100 sft/16 kg per 9.29 square meter after it is heated to 350 F ——— 375 F .

v) Alternative to bitumen shall be P.v.c. sheet with a minimum thickness of 1/16 inches / 2 m.m. or patent bitumen felts or polythene sheet as provided in the item of work.

vi) Appropriate adhesive coat shall be provided with proper overlapping.

2. WATER PROOFING OF ROOFS:-

a) Asphalt water proofing over roofs:

i) The solid asphalt shall be broken into pieces and put into an iron pot and will be heated.

ii) It shall be stirred well while it melts and when thoroughly fused, it will be spread over the concrete surface at the rate of 40 Ibs per 100 sft / 18 kg per 9.29 square meter unless otherwise, specified.

iii) It will be poured on the surface by means of a rose can.

b) Water Proofing Of Roofs With Plastic Bitumen:-

i) The surface to be treated shall be thoroughly cleaned of all dirt and dust. A primary coat of light diesel oil at a rate of 15 Ibs per 100 sft / 7 kg per 9.29 square meters applied on it.

ii) Plastic bitumen treated to a temperature of 375 F" will be applied on the surface at a rate of 30 Ibs per 100 sft / 14 kg per 9.29 square meters.

iii) The surface shall be blinded with clean and dry sand at 1.5 eft per 100 sft / 0.0425 c.u.m. per 9.29 square meters.

iv) On the next day the excess sand should be removed with brushed and a second coat of plastic bitumen heated to temperature of 375 F' should be applied at 25 Ibs per 100 sft / 11 kg per 9.29 square meters.

v) The surface should then be blinded with clean dry sand at 1.5 eft per 100 sft / 0.0425 c.u.m. per 9.29 square meters.

c) Roofing Felts:-

i) Felts shall be of approved local or imported manufacture, one, two, three, four or five ply as specified.

ii) The roof surface shall be cleaned of all dirt and dust and depressions, if any, shall be filled in with 1:3 cement mortar without any extra cost.

iii) Over the surface thus prepared a layer of bitumen heated to the fusing point will be spread at the rate of 30 Lbs/100 Sft.

iv) Side laps shall be 2" inches / 50 m.m. and end laps shall be 6 inches / 50 m.m.
v) The side laps shall be made nailed with 1.2" inches / 30 m.m. clout nails at 6" inches / 150 m.m. centers. Two rows shall be used at end laps at 3" inches / 75 m.m. centers and intermediate between the end laps nail at 10" inches / 250 m.m. centers, in rows 3" inches / 75 m.m. apart.
vi) Stuck joints shall be formed at the side and end laps by a suitable bitmastic adhesive in addition to nails if required.
vii) The net superficial area shall be measured without any extra allowance for laps or welts.
viii) No deductions shall be made for opening of any shape not exceeding 4.3 square feet / 0.4 square meters.

DAMP PROOF COURSE AND WATER PROOFING ROOFS

SUB-HEAD CODE 108

S. No.	Description	Unit	Rate in Rs.
1	Providing and laying 1 inch (25 mm) thick damp proof course with cement concrete 1:2:4 cast in situ using graded screened bajri of 3/4 inch (19 mm) and down gauge mixed with any approved water proofing agent including compacting, curing form work and its removal etc. complete, but excluding the cost of water proofing agent.	100 Sq.ft.	3,662.05
		Sq.m.	394.18
2	Providing and laying 1-1/2 inches (38 mm) thick damp proof course with cement concrete 1:2:4 cast in situ using graded screened bajri of 3/4 inch (19 mm) and down gauge mixed with any approved water proofing agent including compacting, curing form work and its removal etc. complete, but excluding the cost of water proofing agent..	100 Sq.ft.	4,608.65
		Sq.m.	496.07
3	Providing and laying 2 inches (51 mm) thick damp proof course with cement concrete 1:2:4 cast in situ using graded screened bajri of 3/4 inch (19 mm) and down gauge mixed with any approved water proofing agent including compacting, curing form work and its removal etc. complete, but excluding the cost of water proofing agent .	100 Sq.ft.	5,555.26
		Sq.m.	597.96
4	Extra for using water proofing agent cemto in item Nos. 1,2 and 3 (quantity to be used as per manufacturer's specification).	lb	254.50
		Kg.	561.08
5	Extra for using water proofing agent pudlo in item Nos. 1,2 and 3 (quantity to be used as per manufacturer's specification).	lb	81.30
		Kg.	179.24
6	Extra for using water proofing agent cemcon in item Nos. 1,2 and 3 (quantity to be used as per manufacturer's specification).	Im.gl.	1,167.00
		Litre	256.70
7	Extra for using water proofing agent pucca kam in item Nos. 1,2 and 3 (quantity to be used as per manufacturer's specification).	Im.gl.	2,817.00
		Litre	619.65
8	Providing and laying 1-1/2 inches (38 mm) thick damp proof course with cement concrete 1 ;2:4 cast in situ using graded screened bajri of 3/4 inch (19 mm) and down gauge including compacting, curing, form work and its removal etc. complete with applying a coat of hot bitumen (maxphalt 80/100 or equivalent) using 35 Lbs. per hundred square feet (1.71 Kg/sm) on damp proof course after complete drying and cleaning the surface .	100 Sq.ft.	7,334.58
		Sq.m.	789.49
9	Providing and laying 2 inches (51 mm) thick damp proof course with cement concrete 1:2:4 cast in situ using graded screened bajri of 3/4 inch (19 mm) and down gauge including compacting, curing, form work and its removal etc. complete with applying a coat of hot bitumen (maxphalt 80/100 or equivalent) using 35 Lbs. per hundred square feet (1.71 Kg/sm) on damp proof course after complete drying and cleaning the surface .	100 Sq.ft.	8,526.80
		Sq.m.	917.82

DAMP PROOF COURSE AND WATER PROOFING ROOFS
SUB-HEAD CODE 108

S. No.	Description	Unit	Rate in Rs.
10	Providing and laying damp proof course of hessian cloth impregnated with bitumen (hot application) at the rate of 20 Lbs. of bitumen per hundred square feet (0.97 Kg per s.m.) on the smooth finished plinth surface made by 1 /2 inch (13 mm) thick cement plaster 1:4 covered with a coat of hot bitumen at the rate of 15 Lbs. per hundred square feet (0.73 Kg/sm) of surface including blinding the top surface with course sand using 4 Cft. per hundred square feet (0.012 Cu.m per s.m.) etc. complete in ground floor.	100 Sq.ft. Sq.m.	10,133.01 1,090.71
11	Providing damp proof course on vertical surface with 3/4 inch (19 mm) thick cement plaster 1:4 mixed with any approved water proofing agent including curing etc. complete, but excluding the cost of water proofing agent .	100 Sq.ft. Sq.m.	5,353.01 576.19
12	Providing a coat of bitumen emulsion at 10 Lbs. per % sft. (0.49 Kg/sm) on walls and floor in ground floor.	100 Sq.ft. Sq.m.	1,010.75 108.80
13	Providing and laying lime concrete 1:2:4 (1 lime 2 sand and 4 broken stone ballast 1 inch to 1-1/2 inches) (25 mm to 38 mm) on ground floor roof top to required slope including ramming, finishing smooth and curing etc. complete.	100 Cft. Cu.m.	23,341.63 8,243.03
14	Providing and laying lime concrete 1:2:4 (1 lime 2 surkhi and 4 Jhama brick ballast 1 inch) (225 mm) and down gauge on ground floor roof top to required slope including ramming, finishing, smooth and curing etc. complete.	100 Cft. Cu.m.	25,651.01 9,058.58
15	Providing and laying on ground floor roof, plastic bitumen No.3 G 30 lbs. per % sft (14.6 Kg per s.m.) blinded with coarse sand a 1-1/2 Cft per % sft (0.046 cm per sq.m.) in 1st coat and 25 lbs per % sft (12,21 Kg per s.m.) of bitumen blinded with 1-1/2 cft of coarse sand per % sft (0.046 cum. per sft) in 2nd coat over a coat of light Diesel oil priming at 15 lbs. per % sft. (7.32 Kg. per Sq.m.) including light ramming with thappies .	100 Sq.ft. Sq.m.	5,152.88 554.65
16	Providing and laying on ground floor roof ruberoid 3 ply reelia roofing including asphalt saturated felt No. 7 as under lay, each treated with ruberoid compound including providing, flushing and finished with washed gravel as per specifications complete .	100 Sq.ft. Sq.m.	24,634.36 2,651.62
17	Providing and laying heated asphalt on ground floor roof at the rate of 40 Lbs. per hundred square feet (1.95 Kg per s.m) finished with washed gravel 3/8 inch (9.5 mm) down gauge at 3 cubic feet per % sft. (0.086 Cu.m. per s.m) including ramming with thappies and rounding of comers with cement mortar etc. complete .	100 Sq.ft. Sq.m.	4,750.47 511.34
18	Providing and laying heated asphalt on ground floor roof at the rate of 20 Lbs. per hundred square feet (0.98 Kg per s.m) finished with washed coarse sand 3 cubic feet per hundred square feet (0-086 C.M. per s.m) including ramming with thappies etc. complete .	100 Sq.ft. Sq.m.	3,261.11 351.02

DAMP PROOF COURSE AND WATER PROOFING ROOFS

SUB-HEAD CODE 108

S. No.	Description	Unit	Rate in Rs.
19	Providing and laying on ground floor roof blanco roofing felt-2 ply over a tack coat of bitumen at 30 lbs per hundred square feet (14.53 Kg per s.m) and sealed with bitumen compound at the rate of 30 lbs per hundred square feet (1.45 Kg per s.m) and blinded with washed gravel 3/8 inches (9.5 mm) down gauge at the rate of 3 cubic feet per hundred square feet (0.086 Kg per s.m) including ramming with thappies etc. complete as per specification.	100 Sq.ft. Sq.m.	19,209.91 2,067.74
20	Providing and laying jutoid water proof matting 1/8 inch (3.2 mm) thick on external faces of walls below ground level with adhesive No. 70 at the rate of 10 lbs per hundred square feet (0.48 Kg per s.m) diluted with 13% of solvent lime kerosene oil etc. including the cost of overlaps, cleaning and scraping the surface by wire brushes before applying the adhesive and jutoid etc. complete as per specifications .	100 Sq.ft. Sq.m.	10,963.50 1,180.10
21	Providing and laying jutoid water proof matting 1/8 inch (3.2 mm) thick under raft, basement floor, under floors and plinth with adhesive No. 70 at the rate of 10 lbs per hundred square feet (0.48 Kg per s.m) diluted with 13 % of solvent like kerosene oil etc. including the cost of overlaps, cleaning and scraping the surface by wire brushes before applying the adhesive and jutoid etc. complete as per specification .	100 Sq.ft. Sq.m.	10,397.25 1,119.15
22	Providing and laying jutoid water proof matting 1/8 inch (3.2 mm) thick on ground floor rooftop with adhesive No. 70 at the rate of 10 lbs per hundred square feet (0.48 Kg per s.m) diluted with 13 % of solvent like kerosene oil etc including cost of over laps, cleaning and scraping the surface by wire brushes before applying the adhesive and jutoid etc. complete as per specifications .	100 Sq.ft. Sq.m.	10,706.00 1,152.38
23	Providing and laying jutoid water proof matting 1/12 inches to 1/16 inch (2.1 mm to 1.6 mm) thick on top flat or sloping roofs (ground floor) with adhesive No. 70 at the rate of 10 lbs per hundred square feet (0.48 Kg per s.m) diluted with 13% of solvent like kerosine oil etc. including the cost of overlaps, cleaning and scraping the surface with wire brushes before applying the adhesive and jutoid etc. complete as per specifications .	100 Sq.ft. Sq.m.	8,606.00 926.34
24	Providing and laying jutoid water proof matting 1/12 inch to 1/16 inch (2.1 mm to 1.6 mm) thick over corrugated roof (ground floor roof) with adhesive No. 70 at the rate of 20 lbs per hundred square feet (0.97 Kg per s.m) diluted with 13% of solvent like kerosene oil etc. including the cost of overlaps, cleaning and scraping the surface with wire brushes before applying the adhesive and jutoid etc. complete as per specifications .	100 Sq.ft. Sq.m.	12,896.38 1,388.15
25	Providing and laying 1:9 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge In terracing 3 inches (76 mm) average thickness to required slope in panels including form work, consolidation, finishing, curing etc. and painting the surface with plastic bitumen No. 4 at the rate of 15 lbs per hundred square feet (0.73 Kg per s.m) blinded with sand at the rate of 2 cubic feet per hundred square feet (0.06 Kg per s.m) complete" on ground floor roof.	100 Sq.ft. Sq.m.	8,229.59 885.83

DAMP PROOF COURSE AND WATER PROOFING ROOFS
SUB-HEAD CODE 108

S. No.	Description	Unit	Rate in Rs.
26	Providing and laying single layer of polythene sheet of 500 gauge (0.005 inch or 0.13 mm thick) under floors for water proofing laid as per specifications and instructions of the Engineer-in-Charge in ground floor.	100 Sq.ft. Sq.m.	978.75 105.35
	Bituflex for water proofing.		
27	Water proofing of roof slab using Bituflex @ 10 Kg per % sft in three coats, i/c cleaning /scraping the extra mortar etc. from the roof surface,and washing the surface with water and filling the depressions using Bituflex: sand mortar (1.2).Applyingone one primer coal, over moist surface using a mix of 50 %Bituflex and 50 % water blirded the surface with saul any floor in any light.	100 Sqft. Sqm.	1,243.06 133.80
28	Water proofing of roof slab using Bituflex @ 12.5 Kg per % Sft in three coats and Hassien cloth, including the cost of removing, scraping mortar etc from the roofsurface, disposing of scraped material/debries and removing the dust by washing with water and Removing the undulations and depressions with using Bituflex, sand mortar (1: 2). Applying one primer coat over moist surface using a mix of 50% Bituflex and 50% water. Applying 1st pur coat of Bituflex, laying Hassien cloth with 2" overlap at the joints, saturating the hassien cloth with 2nd coat of Bituflex and sandblinding the surface with sand.	100 Sqft. Sqm.	4,467.90 480.92
29	Providing and laying double layer of polythene sheet of 500 gauge (0.005 or 0.13 mm thick) under floors for water proofing laid as per specifications and instructions of the Engineer-in-Charge in ground floor.	100 Sq.ft. Sq.m.	1,880.63 202.43
30	Extra per one storey height in item No. 12 if the building is of more than one storey height.	100 Sq.ft. Sq.m.	296.88 31.96
31	Extra per one storey height in item No. 13 and 14 if the building is of more than one storey height.	100 Sq.ft. Sq.m.	1,812.50 195.10
32	Extra per one storey height in item No. 15 if the building is of more than one storey height ..	100 Sq.ft. Sq.m.	439.38 47.29
33	Extra per one storey height in item No. 16,17 and 18 if the building is of more than one storey height.	100 Sq.ft. Sq.m.	391.88 42.18
34	Extra per one storey height in item No. 19 building is of more than one storey height .	100 Sq.ft. Sq.m.	439.38 47.29
35	Extra per one storey height in item No. 20,21,22 and 23 if the building is of more than one storey height .	100 Sq.ft. Sq.m.	593.75 63.91
36	Extra per one storey height in item No. 24 if the building is of more than one storey height..	100 Sq.ft. Sq.m.	439.38 47.29
37	Extra per one storey height in item No. 25 if the building is of more than one storey height .	100 Sq.ft.	841.25

DAMP PROOF COURSE AND WATER PROOFING ROOFS

SUB-HEAD CODE 108

S. No.	Description	Unit	Rate in Rs.
		Sq.m.	90.55
38	Extra per one storey height in item No. 26 if the building is of more than one storey height.	100 Sq.ft.	35.63
		Sq.m.	3.83
39	Extra for every additional layer of Jutoid water proof matting in item Nos. 20,21 and 22 .	100 Sq.ft.	9,950.50
		Sq.m.	1,071.06
40	Extra for every additional layer of jutoid water proof matting in Item Nos. 23 and 24 .	100 Sq.ft.	9,936.13
		Sq.m.	1,069.51

CEMENT CONCRETE CAST IN SITU IN SUPERSTRUCTURE

Code 109

PAKISTAN PUBLIC WORKS DEPARTMENT

CEMENT CONCRETE CAST IN SITU IN SUPERSTRUCTURE

SUB-HEAD CODE 109

Note:

The Specification of Reinforced cement concrete has been prepared & inserted in the introduction of Sub-Head No. 114 which also cover Cement concrete cast in situ in superstructure, Execution work shall be carried out as per above Specifications.Where there is any difference or some topics are not available, then specifications 2022 shall be followed.

WALLS

S. No.	Description	Unit	Rate in Rs.
1	Providing and laying in situ 1:4:8 cement concrete in walls more than 6 inches (152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor .	100 Cft. Cu.m.	38,810.63 13,705.86
2	Providing and laying in situ 1:3:6 cement concrete in walls more than 6 inches (152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor .	100 Cft. Cu.m.	41,459.15 14,641.17
3	Providing and laying in situ 1:2-1/2:5 cement concrete in walls more than 6 inches (152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor	100 Cft. Cu.m.	43,258.38 15,276.57
4	Providing and laying in situ 1:3:3 cement concrete in walls more than 6 inches (152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	46,430.99 16,396.97
5	Providing and laying in situ 1:2:4 cement concrete in walls more than 6 inches (152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor .	100 Cft. Cu.m.	45,707.52 16,141.48
6	Providing and laying in situ 1:2:3 cement concrete in walls more than 6 inches (152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor .	100 Cft. Cu.m.	47,854.45 16,899.66
7	Providing and laying in situ 1:1-1/2:3 cement concrete in walls more than 6 inches (152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	49,524.58 17,489.46

CEMENT CONCRETE CAST IN SITU IN SUPERSTRUCTURE

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S. No.	Description	Unit	Rate in Rs.
8	Providing and laying in situ 1:2:2 cement concrete in walls more than 6 inches (152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	50,709.57 17,907.93
9	Providing and laying in situ 1:1:2 cement concrete in walls more than 6 inches (152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	57,107.93 20,167.50
10	Providing and laying in situ 1:1-1/2:1-1/2 cement concrete in walls more than 6 inches (152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	57,442.65 20,285.70
11	Providing and laying in situ 1:4:8 cement concrete in walls 4 inches to 6 inches (102 mm to 152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	50,138.62 17,706.30
12	Providing and laying in situ 1:3:6 cement concrete in walls 4 inches to 6 inches (102 mm to 152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	52,787.14 18,641.62
13	Providing and laying in situ 1:2-1/2:5 cement concrete in walls 4 inches to 6 inches (102 mm to 152 mm) in, thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	54,586.36 19,277.01
14	Providing and laying in situ 1:3:3 cement concrete in walls 4 inches to 6 inches (102 mm to 152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	57,758.98 20,397.41
15	Providing and laying in situ 1:2:4 cement concrete in walls 4 inches to 6 inches (102 mm to 152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	57,035.51 20,141.92
16	Providing and laying in situ 1:2:3 cement concrete in walls 4 inches to 6 inches (102 mm to 152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	59,182.44 20,900.10

CEMENT CONCRETE CAST IN SITU IN SUPERSTRUCTURE
SUB-HEAD CODE 109

S. No.	Description	Unit	Rate in Rs.
17	Providing and laying in situ 1:1-1/2:3 cement concrete in walls 4 inches to 6 inches (102 mm to 152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	60,756.32 21,455.91
18	Providing and laying in situ 1:2:2 cement concrete in walls 4 inches to 6 inches (102 mm to 152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	62,040.55 21,909.43
19	Providing and laying in situ 1:1:2 cement concrete in walls 4 inches to 6 inches (102 mm to 152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	68,435.92 24,167.94
20	Providing and laying in situ 1:1-1/2:1-1/2: cement concrete in walls 4 inches to 6 inches (102 mm to 152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	68,773.63 24,287.20
21	Providing and laying in situ 1:4:8 cement concrete in walls lesser than 4 inches (102 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	68,119.82 24,056.31
22	Providing and laying in situ 1:3:6 cement concrete in walls lesser than 4 inches (102 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	70,768.35 24,991.63
23	Providing and laying in situ 1:2-1/2:5 cement concrete in walls lesser than 4 inches (102 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc- complete in ground floor.	100 Cft. Cu.m.	72,567.57 25,627.02
24	Providing and laying in situ 1:3:3 cement concrete in walls lesser than 4 inches (102 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	75,740.19 26,747.42
25	Providing and laying in situ 1:2:4 cement concrete in walls lesser than 4 inches (102 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor .	100 Cft. Cu.m.	75,016.72 26,491.93

CEMENT CONCRETE CAST IN SITU IN SUPERSTRUCTURE

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S. No.	Description	Unit	Rate in Rs.
26	Providing and laying in situ 1:2:3 cement concrete in walls lesser than 4 inches (102 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	77,107.40 27,230.25
27	Providing and laying in situ 1:1-1/2:3 cement concrete in walls lesser than 4 inches (102 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor .	100 Cft. Cu.m.	78,833.78 27,839.91
28	Providing and laying in situ 1:2:2 cement concrete in walls lesser than 4 inches (102 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	80,018.77 28,258.39
29	Providing and laying in situ 1:1:2 cement concrete in walls lesser than 4 inches (102 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	86,417.13 30,517.95
30	Providing and laying in situ 1:1-1/2:1-1/2 cement concrete in walls lesser than 4 inches (102 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor..	100 Cft. Cu.m.	86,751.85 30,636.16
31	Providing and laying in situ 1:12 cement concrete in walls more than 6 inches (152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor..	100 Cft. Cu.m.	35,885.15 12,672.73
32	Providing and laying in situ 1:9 cement concrete in walls more than 6 inches (152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor..	100 Cft. Cu.m.	38,208.47 13,493.21
33	Providing and laying in situ 1:8 cement concrete in walls more than 6 inches (152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor .	100 Cft. Cu.m.	39,351.38 13,896.82
34	Providing and laying in situ 1:7 cement concrete in walls more than 6 inches (152mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor..	100 Cft. Cu.m.	40,850.12 14,426.10
35	Providing and laying in situ 1:6 cement concrete in walls more than 6 inches (152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor .	100 Cft. Cu.m.	42,829.97 15,125.28

CEMENT CONCRETE CAST IN SITU IN SUPERSTRUCTURE

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S. No.	Description	Unit	Rate in Rs.
36	Providing and laying in situ 1:5 cement concrete in walls more than 6 inches (152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor .	100 Cft.	45,609.26
		Cu.m.	16,106.77
37	Providing and laying in situ 1:4 cement concrete in walls more than 6 inches (152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor .	100 Cft.	49,781.18
		Cu.m.	17,580.07
38	Providing and laying in situ 1:3 cement concrete in walls more than 6 inches (152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor..	100 Cft.	56,629.26
		Cu.m.	19,998.45
39	Providing and laying in situ 1:12 cement concrete in walls 4 to 6 inches (102 mm to 152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft.	47,202.52
		Cu.m.	16,669.43
40	Providing and laying in situ 1:9 cement concrete in walls 4 to 6 inches (102 mm to 152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft.	49,528.82
		Cu.m.	17,490.95
41	Providing and laying in situ 1:8 cement concrete in walls 4 to 6 inches (102 mm to 152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor..	100 Cft.	50,668.74
		Cu.m.	17,893.52
42	Providing and laying in situ 1:7 cement concrete in walls 4 to 6 inches (102 mm to 152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft.	52,167.48
		Cu.m.	18,422.79
43	Providing and laying in situ 1:6 cement concrete in walls 4 to 6 inches (102 mm to 152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft.	54,147.33
		Cu.m.	19,121.97
44	Providing and laying in situ 1:5 cement concrete in walls 4 to 6 inches (102 mm to 152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft.	56,926.62
		Cu.m.	20,103.47
45	Providing and laying in situ 1:4 cement concrete in walls 4 to 6 inches (102 mm to 152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft.	61,098.54
		Cu.m.	21,576.77

CEMENT CONCRETE CAST IN SITU IN SUPERSTRUCTURE

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S. No.	Description	Unit	Rate in Rs.
46	Providing and laying in situ 1:3 cement concrete in walls 4 to 6 inches (102 mm to 152 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc- complete in ground floor.	100 Cft. Cu.m.	67,946.62 23,995.15
47	Providing and laying in situ 1:12 cement concrete in walls lesser than 4 inches (102 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	65,146.22 23,006.19
48	Providing and laying in situ 1:9 cement concrete in walls lesser than 4 inches (102 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	67,472.53 23,827.72
49	Providing and laying in situ 1:8 cement concrete in walls lesser than 4 inches (102 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	68,612.45 24,230.28
50	Providing and laying in situ 1:7 cement concrete in walls lesser than 4 inches (102 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor..	100 Cft. Cu.m.	70,167.44 24,779.42
51	Providing and laying in situ 1:6 cement concrete in walls lesser than 4 inches (102 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	72,147.29 25,478.60
52	Providing and laying in situ 1:5 cement concrete in walls lesser than 4 inches (102 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor..	100 Cft. Cu.m.	74,926.58 26,460.10
53	Providing and laying in situ 1:4 cement concrete in walls lesser than 4 inches (102 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	79,098.50 27,933.40
54	Providing and laying in situ 1:3 cement concrete in walls lesser than 4 inches (102 mm) in thickness in superstructure using screened graded bajri 3/4 inch (19 mm) and down gauge including compacting, curing, cost of form work and its removal etc. complete in ground floor.	100 Cft. Cu.m.	85,946.58 30,351.78
55	Extra for first floor in item Nos. 1 to 10, 31 to 38	100 Cft. Cu.m.	795.63 280.97
56	Extra for every additional floor above first floor in item Nos. 1 to 10, 31 to 38.	100 Cft. Cu.m.	498.75 176.13

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S. No.	Description	Unit	Rate in Rs.
57	Extra for first floor in item nos. 11 to 20, 39 to 46	100 Cft.	795.63
		Cu.m.	280.97
58	Extra for every additional floor above first floor in item Nos. 11 to 20, 39 to 46	100 Cft.	498.75
		Cu.m.	176.13
59	Extra for first floor in item Nos. 21 to 30, 47 to 54	100 Cft.	795.63
		Cu.m.	280.97
60	Extra for every additional floor above first floor in item nos. 21 to 30, 47 to 54.	100 Cft.	498.75
		Cu.m.	176.13
	COLUMNS		
61	Providing and laying in situ 1:3:6 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in pillars and columns of any shape (excluding T and L) in superstructure including compacting, curing, cost of from work and its removal etc., complete in ground floor.	100 Cft.	40,054.18
		Cu.m.	14,145.01
62	Providing and laying in situ 1:2:4 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in pillars and columns of any shape (excluding T and L) in superstructure including compacting, curing, cost of from work and its removal etc., complete in ground floor.	100 Cft.	44,302.55
		Cu.m.	15,645.31
63	Providing and laying in situ 1:2:3 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in pillars and columns of any shape (excluding T and L) in superstructure including compacting, curing, cost of from work and its removal etc., complete in ground floor.	100 Cft.	46,449.48
		Cu.m.	16,403.49
64	Providing and laying in situ 1:1-1/2:3 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in pillars and columns of any shape (excluding T and L) in superstructure including compacting, curing, cost of from work and its removal etc., complete in ground floor.	100 Cft.	48,119.61
		Cu.m.	16,993.30
65	Providing and laying in situ 1:1:2 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in pillars and columns of any shape (excluding T and L) in superstructure including compacting, curing, cost of from work and its removal etc., complete in ground floor.	100 Cft.	55,702.96
		Cu.m.	19,671.33
66	Providing and laying in situ 1:3:6 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in pillars and columns of shape (T and L) in superstructure including compacting, curing, cost of from work and its removal etc., complete in ground floor .	100 Cft.	42,996.05
		Cu.m.	15,183.93
67	Providing and laying in situ 1:2:4 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in pillars and columns of shape (T and L) in superstructure including compacting, curing, cost of from work and its removal etc., complete in ground floor..	100 Cft.	47,244.42
		Cu.m.	16,684.23

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S. No.	Description	Unit	Rate in Rs.
68	Providing and laying in situ 1:2:3 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in pillars and columns of shape (T and L) in superstructure including compacting, curing, cost of from work and its removal etc., complete in ground floor.	100 Cft. Cu.m.	49,391.35 17,442.41
69	Providing and laying in situ 1:1-1/2;3 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge ;in pillars and columns of shape (T and L) in superstructure including compacting, curing, cost of from work and its removal etc., complete in ground floor.	100 Cft. Cu.m.	51,061.48 18,032.21
70	Providing and laying in situ 1:1:2 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in pillars and columns of any shape (excluding T and L) in superstructure including compacting, curing, cost of from work and its removal etc., complete in ground floor.	100 Cft. Cu.m.	63,336.42 22,367.07
71	Providing and laying in situ 1:9 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in pillars and columns of any shape (excluding T and L) in superstructure including compacting, curing, cost of from work and its removal etc., complete in ground floor.	100 Cft. Cu.m.	36,831.31 13,006.87
72	Providing and laying in situ 1:6 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in pillars and columns of any shape (excluding T and L) in superstructure including compacting, curing, cost of from work and its removal etc., complete in ground floor.	100 Cft. Cu.m.	41,452.81 14,638.93
73	Providing and laying in situ 1:9 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in pillars and columns of shape (T and L) in superstructure including compacting, curing, cost of from work and its removal etc., complete in ground floor.	100 Cft. Cu.m.	39,753.50 14,038.83
74	Providing and laying in situ 1:6 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in pillars and columns of shape (T and L) in superstructure including compacting, curing, cost of from work and its removal etc., complete in ground floor.	100 Cft. Cu.m.	44,374.99 15,670.90
75	Extra for first floor in item Nos. 61 to 65 and 71 to 72 ..	100 Cft. Cu.m.	2,668.75 942.46
76	Extra for every additional floor above first floor in item Nos. 61 to 65 and 71 to 72 .	100 Cft. Cu.m.	551.25 194.67
77	Extra for every additional floor in item Nos. 66 to 70 and 73 to 74.	100 Cft. Cu.m.	2,546.88 899.42
78	Extra for every additional floor above first floor in item Nos. 66 to 70 and 73 to 74 .	100 Cft. Cu.m.	539.38 190.48

CEMENT CONCRETE CAST IN SITU IN SUPERSTRUCTURE

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S. No.	Description	Unit	Rate in Rs.
	ARCHES		
79	Providing and laying in situ 1:3:6 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in arches with spandrils more than 6 inches (152 mm) in width in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor..	100 Cft. Cu.m.	40,709.88 14,376.57
80	Providing and laying in situ 1:3:3 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in arches with spandrils more than 6 inches (152 mm) in width in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor..	100 Cft. Cu.m.	45,340.48 16,011.85
81	Providing and laying in situ 1:2:4 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in arches with spandrils more than 6 inches (152 mm) in width in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor.	100 Cft. Cu.m.	44,939.51 15,870.25
82	Providing and laying in situ 1:2:3 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in arches with spandrils more than 6 inches (152 mm) in width in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor.	100 Cft. Cu.m.	47,086.44 16,628.43
83	Providing and laying in situ 1:9 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in arches with spandriis more than 6 inches (152 mm) in width in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor.	100 Cft. Cu.m.	37,448.58 13,224.85
84	Providing and laying in situ 1:6 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in arches with spandriis more than 6 inches (152 mm) in width in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor.	100 Cft. Cu.m.	42,070.08 14,856.92
85	Providing and laying in situ 1:5 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in arches with spandriis more than 6 inches (152 mm) in width in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor.	100 Cft. Cu.m.	44,849.37 15,838.42
86	Providing and laying in situ 1:3:6 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in arches with spandriis 4 inches to 6 inches (102 mm to 152 mm) in width in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor.	100 Cft. Cu.m.	42,290.07 14,934.61
87	Providing and laying in situ 1:3:3 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in arches with spandriis 4 inches to 6 inches (102 mm to 152 mm) in width in superstructure including compacting, curing, cost of form work and its removal etc.. complete in ground floor.	100 Cft. Cu.m.	47,261.91 16,690.40

CEMENT CONCRETE CAST IN SITU IN SUPERSTRUCTURE

SUB-HEAD CODE 109

S. No.	Description	Unit	Rate in Rs.
88	Providing and laying in situ 1:2:4 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in arches with spandrils 4 inches to 6 inches (102 mm to 152 mm) in width in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor.	100 Cft. Cu.m.	46,538.44 16,434.91
89	Providing and laying in situ 1:2:3 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in arches with spandrils 4 inches to 6 inches (102 mm to 152 mm) in width in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor.	100 Cft. Cu.m.	48,685.37 17,193.09
90	Providing and laying in situ 1:9 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in arches with spandrils 4 inches to 6 inches (102 mm to 152 mm) in width in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor..	100 Cft. Cu.m.	39,047.51 13,789.51
91	Providing and laying in situ 1:6 cement concrete using screened graded baJri 3/4 inch (19 mm) and down gauge in arches with spandrils 4 inches to 6 inches (102 mm to 152 mm) in width in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor.	100 Cft. Cu.m.	43,669.01 15,421.58
92	Providing and laying in situ 1:5 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in arches with spandrils 4 inches to 6 inches (102 mm to 152 mm) in width in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor.	100 Cft. Cu.m.	46,448.30 16,403.08
93	Providing and laying in situ 1:3:3 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in arches with spandrils lesser than 4 inches (102 mm) in width in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor.	100 Cft. Cu.m.	58,926.62 20,809.76
94	Providing and laying in situ 1:2:4 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in arches with spandrils lesser than 4 inches (102 mm) in width in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor.	100 Cft. Cu.m.	58,600.65 20,694.64
95	Providing and laying in situ 1:2:3 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in arches with spandrils lesser than 4 inches (102 mm) in width in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor.	100 Cft. Cu.m.	60,707.58 21,438.70
96	Providing and laying in situ 1:9 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in arches with spandrils lesser than 4 inches (102 mm) in width in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor.	100 Cft. Cu.m.	51,109.72 18,049.24

CEMENT CONCRETE CAST IN SITU IN SUPERSTRUCTURE

SUB-HEAD CODE 109

S. No.	Description	Unit	Rate in Rs.
97	Providing and laying in situ 1:6 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in arches with spandrils lesser than 4 inches (102 mm) in width in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor.	100 Cft.	55,731.22
		Cu.m.	19,681.31
98	Providing and laying in situ 1:5 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge In arches with spandrils lesser than 4 inches (102 mm) in width in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor.	100 Cft.	58,513.49
		Cu.m.	20,663.86
99	Extra for first floor in item Nos. 79 to 85	100 Cft.	2,262.50
		Cu.m.	799.00
100	Extra for the first floor in item Nos. 86 to 92	100 Cft.	3,359.38
		Cu.m.	1,186.35
101	Extra for first floor in item Nos. 93 to 98	100 Cft.	4,984.38
		Cu.m.	1,760.22
102	Extra for every additional floor above first floor in item Nos. 79 to 85.	100 Cft.	498.75
		Cu.m.	176.13
103	Extra for every additional floor above first floor in item Nos. 86 to 92.	100 Cft.	649.38
		Cu.m.	229.32
104	Extra for every additional floor above first floor in item Nos. 93 to 98.	100 Cft.	835.63
		Cu.m.	295.10

ARCHITRAVE, COPING AND CORNICE

S. No.	Description	Unit	Rate in Rs.
105	Providing and laying in situ 1:3:6 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in architraves, coping and cornice etc. of required shape in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor .	100 Cft.	33,481.23
		Cu.m.	11,823.80
106	Providing and laying in situ 1:3:3 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in architraves, coping and cornice etc. of required shape in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor..	100 Cft.	38,055.82
		Cu.m.	13,439.30
107	Providing and laying in situ 1:2:4 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in architraves, coping and cornice etc. of required shape in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor ..	100 Cft.	37,729.85
		Cu.m.	13,324.18
108	Providing and laying in situ 1:2:3 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in architraves, coping and cornice etc. of required shape in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor..	100 Cft.	39,876.78
		Cu.m.	14,082.36
109	Providing and laying in situ 1:9 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in architraves, coping and cornice etc. of required shape in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor..	100 Cft.	30,238.92
		Cu.m.	10,678.78

CEMENT CONCRETE CAST IN SITU IN SUPERSTRUCTURE

SUB-HEAD CODE 109

S. No.	Description	Unit	Rate in Rs.
110	Providing and laying in situ 1:6 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in architraves, coping and cornice etc. of required shape in superstructure including compacting, curing, cost of form work and its removal etc., complete in ground floor.	100 Cft.	34,857.43
		Cu.m.	12,309.80
111	Extra for first floor in item Nos. 105 to 110	100 Cft.	2,546.88
		Cu.m.	899.42
112	Extra for every additional floor above first floor in item Nos. 105 to 110.	100 Cft.	539.38
		Cu.m.	190.48
	STEPS		
113	Providing and laying in situ 1:3:6 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in steps including compacting, curing, cost of form work and its removal etc., complete in ground floor.	100 Cft.	28,519.23
		Cu.m.	10,071.48
114	Providing and laying in situ 1:2:4 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in steps including compacting, curing, cost of form work and its removal etc., complete in ground floor.	100 Cft.	32,767.61
		Cu.m.	11,571.78
115	Providing and laying in situ 1:9 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in step including compacting, curing, cost of form work and its removal etc., complete in ground floor.	100 Cft.	25,276.68
		Cu.m.	8,926.38
116	Providing and laying in situ 1:6 cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge in steps including compacting, curing, cost of form work and its removal etc., complete in ground floor	100 Cft.	29,898.18
		Cu.m.	10,558.45
117	Extra for first floor in item Nos. 113 to 116	100 Cft.	1,328.13
		Cu.m.	469.02
118	Extra for every additional floor in item Nos. 113 to 116	100 Cft.	1,111.25
		Cu.m.	392.43
119	Extra for using crushed graded boulders 3/4 inch (19 mm) and down gauge in place of screened graded bajri in 1:4:8 cement concrete in item Nos. 1,11 and 21 ..	100 Cft.	562.50
		Cu.m.	198.65
120	Extra for using crushed graded boulders 3/4 inch (19 mm) and down gauge in place of screened graded bajri in 1:3:6 cement concrete in item Nos. 2, 12, 22, 61, 66, 79, 86, 105 and 113 .	100 Cft.	556.25
		Cu.m.	196.44
121	Extra for using crushed graded boulders 3/4 inch (19 mm) and down gauge in place of screened graded bajri in 1:2-1/2:5 cement concrete in item Nos. 3,13 and 23 ..	100 Cft.	537.50
		Cu.m.	189.82
122	Extra for using crushed graded boulders 3/4 inch (19 mm) and down gauge in place of screened graded bajri in 1:3:3 cement concrete in item Nos. 4, 14, 24, 80, 87, 93, and 106 .	100 Cft.	400.00
		Cu.m.	141.26
123	Extra for using crushed graded boulders 3/4 inch (19 mm) and down gauge in place of screened graded bajri in 1:2:4 cement concrete in item Nos. 5, 15, 25, 62, 67, 81, 88, 94, 107 and 114 .	100 Cft.	518.75

CEMENT CONCRETE CAST IN SITU IN SUPERSTRUCTURE

SUB-HEAD CODE 109

S. No.	Description	Unit	Rate in Rs.
		Cu.m.	183.20
124	Extra for using crushed graded boulders 3/4 inch (19 mm) and down gauge in place of screened graded bajri in 1:2:3 cement concrete in item Nos. 6, 16, 26, 63, 68, 82, 89, 95 and 108 .	100 Cft.	443.75
		Cu.m.	156.71
125	Extra for using crushed graded boulders 3/4 inch (19 mm) and down gauge in place of screened graded bajri in 1:1-1/2:3 cement concrete in item Nos. 7, 17, 27, 64 and 69.	100 Cft.	487.50
		Cu.m.	172.16
126	Extra for using crushed graded boulders 3/4 inch (19 mm) and down gauge in place of screened graded bajri in 1:2:2 cement concrete in item Nos. 8, 18 and 28 .	100 Cft.	350.00
		Cu.m.	123.60
127	Extra for using crushed graded boulders 3/4 inch (19 mm) and down gauge in place of screened graded bajri in 1:1:2 cement concrete in item Nos. 9, 19, 29, 65 and 70 .	100 Cft.	450.00
		Cu.m.	158.92
128	Extra for using crushed graded boulders 3/4 inch (19 mm) and down gauge in place of screened graded bajri in 1:1-1/2:1-1/2 cement concrete in item Nos. 10, 20 and 30 .	100 Cft.	343.75
		Cu.m.	121.39
129	Extra for using 50% crushed graded boulders 3/4 inch (19 mm) and down gauge and 50% screened graded bajri in place of 100 % screened graded bajri in 1:4:8 cement concrete in item Nos. 1,11 and 21 .	100 Cft.	281.25
		Cu.m.	99.32
130	Extra for using 50% crushed graded boulders 3/4 inch (19 mm) and down gauge and 50% screened graded bajri in place of 100 % screened graded bajri in 1:3:6 cement concrete in item Nos. 2, 12, 22, 61, 66, 79, 86, 105 and 113..	100 Cft.	275.00
		Cu.m.	97.12
131	Extra for using 50% crushed graded boulders 3/4 inch (19 mm) and down gauge and 50% screened graded bajri in place of 100 % screened graded bajri in 1:2-1/2:5 cement concrete in item Nos. 3, 13 and 23 .	100 Cft.	268.75
		Cu.m.	94.91
132	Extra for using 50% crushed graded boulders 3/4 inch (19 mm) and down gauge and 50% screened graded bajri in place of 100 % screened graded bajri in 1:3:3 cement concrete in item Nos. 4, 14, 24, 80, 87, 93 and 106 .	100 Cft.	200.00
		Cu.m.	70.63
133	Extra for using 50% crushed graded boulders 3/4 inch (19 mm) and down gauge and 50% screened graded bajri in place of 100 % screened graded bajri in 1:2:4 cement concrete in item Nos. 5,15,25,62.67,81,88,94,107 and 114	100 Cft.	256.25
		Cu.m.	90.49
134	Extra for using 50% crushed graded boulders 3/4 inch (19 mm) and down gauge and 50% screened graded bajri in place of 100 % screened graded bajri in 1:2:3 cement concrete in item Nos. 6, 16, 26, 63, 68, 82, 89, 95 and 108 .	100 Cft.	225.00
		Cu.m.	79.46
135	Extra for using 50% crushed graded boulders 3/4 inch (19 mm) and down gauge and 50% screened graded bajri in place of 100 % screened graded bajri in 1:1-1/2:3 cement concrete in item Nos. 7, 17, 27, 64 and 69 .	100 Cft.	243.75

CEMENT CONCRETE CAST IN SITU IN SUPERSTRUCTURE

SUB-HEAD CODE 109

S. No.	Description	Unit	Rate in Rs.
		Cu.m.	86.08
136	Extra for using 50% crushed graded boulders 3/4 inch (19 mm) and down gauge and 50% screened graded bajri in place of 100 % screened graded bajri in 1:2:2 cement concrete in item Nos. 8, 18 and 28 .	100 Cft.	200.00
		Cu.m.	70.63
137	Extra for using 50% crushed graded boulders 3/4 inch (19 mm) and down gauge and 50% screened graded bajri in place of 100 % screened graded bajri in 1:1:2 cement concrete in item Nos. 9, 19, 29, 65 and 70 .	100 Cft.	225.00
		Cu.m.	79.46
138	Extra for using 50% crushed graded boulders 3/4 inch (19 mm) and down gauge and 50% screened graded bajri in place of 100 % screened graded bajri in 1:1-1/2:1-1/2 cement concrete in item Nos. 10, 20 and 30 .	100 Cft.	175.00
		Cu.m.	61.80
139	Extra if Lawrencepur sand is used in place of local sand at Lahore in item Nos. 1, 2, 3, 11. 12. 13, 21. 22, 23, 61, 66, 79, 86, 105 and 113 .	100 Cft.	2,090.00
		Cu.m.	738.08
140	Extra if Lawrencepur sand is used in place of local sand at Lahore in item Nos. 4, 14, 24, 80, 87, 93 and 106 .	100 Cft.	3,040.00
		Cu.m.	1,073.57
141	Extra if Lawrencepur sand is used in place of local sand at Lahore in item Nos. 5, 15, 25, 62, 67, 81, 88, 94, 107 and 114 .	100 Cft.	1,947.50
		Cu.m.	687.75
142	Extra if Lawrencepur sand is used in place of local sand at Lahore in item Nos. 6, 16, 26, 63, 68, 82, 89. 95 and 108 .	100 Cft.	2,280.00
		Cu.m.	805.18
143	Extra if Lawrencepur sand is used in place of local sand at Lahore in item Nos. 7, 17, 27, 64 and 69 .	100 Cft.	(1,501.50)
		Cu.m.	(530.25)
144	Extra if Lawrencepur sand is used in place of local sand at Lahore in item Nos. 9, 19, 29. 65 and 70 .	100 Cft.	1,710.00
		Cu.m.	603.88
145	Extra if Lawrencepur sand is used in place of local sand at Lahore in item Nos. 8, 10, 18, 20, 28 and 30 .	100 Cft.	2,660.00
		Cu.m.	939.37
146	Extra if Lawrencepur sand is used in place of local sand at Rawalpindi in item Nos. 1, 2, 3, 11, 12, 13, 21, 22, 23, 61, 66, 79, 86, 105 and 113 .	100 Cft.	385.00
		Cu.m.	135.96
147	Extra if Lawrencepur sand is used in place of local sand at Rawalpindi in item Nos. 4. 14, 24, 80, 87, 93 and 106 .	100 Cft.	560.00
		Cu.m.	197.76
148	Extra if Lawrencepur sand is used in place of local sand at Rawalpindi in item Nos. 5, 15, 25, 62, 67, 81, 88, 94, 107 and 114 .	100 Cft.	358.75
		Cu.m.	126.69
149	Extra if Lawrencepur sand is used in place of local sand at Rawalpindi in item Nos. 6, 16, 26, 63, 68, 82, 89, 95 and 108 .	100 Cft.	420.00
		Cu.m.	148.32
150	Extra if Lawrencepur sand is used in place of local sand at Rawalpindi in item Nos. 7, 17, 27, 64 and 69 .	100 Cft.	341.25
		Cu.m.	120.51

CEMENT CONCRETE CAST IN SITU IN SUPERSTRUCTURE

SUB-HEAD CODE 109

S. No.	Description	Unit	Rate in Rs.
151	Extra if Lawrencepur sand is used in place of local sand at Rawalpindi in item Nos. 9, 19, 29, 65 and 70 .	100 Cft. Cu.m.	315.00 111.24
152	Extra if Lawrencepur sand is used in place of local sand at Rawalpindi in item Nos. 8, 10, 18, 20, 28 and 30 .	100 Cft. Cu.m.	490.00 173.04
153	Extra if Lawrencepur sand is used in place of local sand at Peshawar in item Nos. 8, 10, 18, 20, 28 and 30 .	100 Cft. Cu.m.	910.00 321.36
154	Extra if Lawrencepur sand is used in place of local sand at Peshawar in item Nos. 1, 2, 3, 11, 12, 13, 21, 22, 23, 61, 66, 79, 86, 105 and 113 .	100 Cft. Cu.m.	715.00 252.50
155	Extra if Lawrencepur sand is used in place of local sand at Peshawar in item Nos. 4, 14, 24, 80, 87, 93 and 106 .	100 Cft. Cu.m.	1,040.00 367.27
156	Extra if Lawrencepur sand is used in place of local sand at Peshawar in item Nos. 5, 15, 25, 62, 67, 81, 88, 94, 107 and 1 14 .	100 Cft. Cu.m.	666.25 235.28
157	Extra if Lawrencepur sand is used in place of local sand at Peshawar in item Nos. 6, 16, 26, 63, 68, 82, 89, 95 and 108 .	100 Cft. Cu.m.	780.00 275.45
158	Extra if Lawrencepur sand is used in place of local sand at Peshawar in item Nos. 7, 17, 27, 64 and 69 .	100 Cft. Cu.m.	633.75 223.81
159	Extra if Lawrencepur sand is used in place of local sand at Peshawar in item Nos. 9, 19, 29, 65 and 70 .	100 Cft. Cu.m.	585.00 206.59

CEMENT CONCRETE SOLID BLOCK MASONRY

Code 110

CEMENT CONCRETE SOLID BLOCK MASONRY (SH-110)

Brief Specification

MATERIAL

Coarse aggregate. The coarse aggregate for the cement concrete shall be gravel obtained by screening the usual mixture of gravel and sand locally known as bajri. The contractor shall screen the bajri through ¾" and 3/16" sieves as many times as may be necessary to obtain such material as shall pass 100% through ¾" sieve and shall all be retained on the 3/16" sieve. If compact block moulding and vibrating machines are used the grading of the material shall be as specified by the makers if not specified by the maker as found satisfactory by the Engineer in-charge for the particular type of machine in use. The Engineer in-charge shall test a representative sample for the aggregate collected by the contractor at the site from time to time and if this sample does not conform with the above grading the entire gravel collected by the contractor will be liable to be rejected.

The gravel shall be free from soft, friable, porous flaky, elongated or laminated pieces. The gravel must also be free from dirt, silt, clay shale, alkali, or organic matter. It shall be sufficiently strong to utilise the full strength of cementing material.

2 ***Sand.*** As specified for 1:3: 6 cement concrete for foundation.

3 ***Cement.*** As specified for 1: 3: 6 cement concrete.

4 ***Proportioning.*** The unit of measure shall be one bag of cement, the standard proportioning for block of 1: 3: 6 cement concrete, if a bag of one Cft is used shall be:-

Cement-1 Part (1 Cft.); Sand-3 parts (3 Cft.); Gravel-6 parts (6 Cft.).

If a bag of 1.2 Cft. is used the standard proportioning shall be:-

Cement 1 part (1.2 Cft.)
Sand 3 part (3.6 Cft.).
Gravel aggregate 6 parts (7.2 Cft.).

The cement must on no account be measured volumetrically. The water will be measure in four gallon kerosene oil tin which should have sub-divisions reading up to ½ gallon clearly marked on its inside with white paint. The slump will be specified and intimated to the contractor by the Engineer-in-charge and the contractor will have to maintain the specified slump throughout.

5 ***Mixing.*** The mixing shall be done in approval mechanical mixers of which the rates capacity for this class of concrete shall not be less than 10/7 cubic feet (10 Cft.) total dry material, i.e., sum of volumes of aggregates and cement and Cft. mixed concrete for 1 cubic foot bag batch, and 14/10 for 1.2 cubic feet bag match.

After all the material is loaded into the drum, the concrete shall be mixed until it is uniform in colour and consistency but for not less than 1-1/2 minutes. Every effort shall be made to control the speed of rotation, to conform to the manufacturer's recommendations. No more concrete shall be mixed than can be used before the initial set has been commenced.

BLOCK MOULDING

The forms shall be of steel fabricated. These should be true to dimension. The internal dimensions of these forms for the various sizes of blocks shall be such that the finished blocks can be conveniently handled by a labourer and also such that header and stretcher courses similar to brick work can be laid for all walls of greater than 6 inches thickness and the height of any coarse (for any thickness of wall) does not exceed 6 inches. The forms shall be so fabricated that they retain their true shape throughout the period of their use.

The finished block shall be true to shape, i.e., every face shall be a perfect rectangle exactly parallel to the opposite face and exactly perpendicular to the adjoining faces. Blocks with broken edges or which are skew will not be allowed to be used on the work and must be removed from the site of work within 24 hours of their being rejected.

After 2 days in the case of machine moulded blocks and 3 day in the case of manually moulded blocks they may be removed and stacked to not more than 3 feet height. The block stacks are to be kept wet for a period of 10 days. The blocks will be allowed to dry for 10 days after curing before being used on the work. The blocks cast on different dates must be separately stacked; the date of casting proportion and number of block in each stack being clearly indicated by writing on a 'T' to be erected in the ground near the stack.

Proportion of mortar. The sand for the mortar shall be that obtained from Malir/Lawrancepur quarries. The material passing 3/16 inch sieve shall be used as sand. The mortar shall be mixed in the proportion specified in the schedule of quantities. The required quantity of sand (for one bag of cement only) will be measured and shall be mixed dry by turning over and over till all particles of sand are well coated with cement. Minimum quantity of water to ensure work-ability will be added and then mortar turned over and over until homogeneous. The mixing will be done on water tight platforms as specified for cement concrete. Only sufficient mixture will be wetted as can be used within half an hour of mixing.

Workmanship:- The block masonry is to be in English bound and no more bats shall be used than are necessary to complete the bond. The height of any course shall not exceed 6 inches. Special care shall be exercised in selecting the block face which will be pointed. The better face being on the side of pointing and inferior face being on the side of plaster. For walls of greater than 6 inches thickness header and stretcher courses similar to brickwork must be used.

In laying each course must be truly level and in perfect bound. All blocks being thoroughly bedded and finished with mortar. The thickness of joints shall not exceed ½ inch. The walls must be carried up regularly and no portion of the work be left more than 3 feet lower than any other. Temporary steps during the construction must be raked according to the bound and not toothed so that when the work is continued the new blocks will be laid over those previously laid and no between them. All masonry work will be kept wet for at least 10 days after it is laid.

PAKISTAN PUBLIC WORKS DEPARTMENT

CEMENT CONCRETE SOLID BLOCK MASONRY

SUB-HEAD CODE 110

S. No.	Description	Unit	Rate in Rs.
	FOUNDATION BASEMENT AND PLINTH		
1	Providing and laying 1:4:8 cement concrete solid block masonry more than 6 inches (152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete; foundation and basement masonry upto 5 feet (1-52Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level .	100 Cft. Cu.m.	26,126.81 9,226.61
2	Providing and laying 1:3:6 cement concrete solid block masonry more than 6 inches (152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out Joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level .	100 Cft. Cu.m.	28,525.24 10,073.60
3	Providing and laying 1:2-1/2:5 cement concrete solid block masonry more than 6 inches (152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level.	100 Cft. Cu.m.	30,306.69 10,702.72
4	Providing and laying 1:2:4 cement concrete solid block masonry more than 6 inches (152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level .	100 Cft. Cu.m.	32,395.58 11,440.40
5	Providing and laying 1:12 cement concrete solid block masonry more than 6 inches (152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc complete; foundation and basement masonry upto 5 fee' (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level .	100 Cft. Cu.m.	23,589.19 8,330.45
6	Providing and laying 1:9 cement concrete solid block masonry more than 6 inches (152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete; foundation and basement masonry upto 5 feel (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground [eve! ..	100 Cft. Cu.m.	25,601.87 9,041.22

CEMENT CONCRETE SOLID BLOCK MASONRY
SUB-HEAD CODE 110

S. No.	Description	Unit	Rate in Rs.
7	Providing and laying 1:8 cement concrete solid block masonry more than 6 inches (152 mm) thick using graded Screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc, "complete; foundation and basement masonry upto 5 feel '(1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level .	100 Cft. Cu.m.	26,636.52 9,406.61
8	Providing and laying 1:7 cement concrete solid block masonry more than 6 inches (152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in -lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level.	100 Cft. Cu.m.	27,994.36 9,886.13
9	Providing and laying 1:6 cement concrete solid block masonry more than 6 inches (152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level .	100 Cft. Cu.m.	29,783.49 10,517.95
10	Providing and laying 1:5 cement concrete solid block masonry more than 6 inches (152 mm) thick using graded screened baJri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level .	100 Cft. Cu.m.	32,307.98 11,409.47
11	Providing and laying 1:4:8 cement concrete solid block masonry 4 inch to 6 inch (102 mm to 152) thick using screened graded bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground levet ..	100 Cft. Cu.m.	28,189.18 9,954.92
12	Providing and laying 1:3:6 cement concrete solid block masonry 4 inch to 6 inch (102 mm to 152) thick using screened graded bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level ..	100 Cft. Cu.m.	30,661.83 10,828.13
13	Providing and laying 1:2-1/2:5 cement concrete solid block masonry 4 inch to 6 inch (102 mm to 152) thick using screened graded bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 foot (1.2 Ru.m.) height from ground level.	100 Cft. Cu.m.	32,342.64 11,421.71

CEMENT CONCRETE SOLID BLOCK MASONRY
SUB-HEAD CODE 110

S. No.	Description	Unit	Rate in Rs.
14	Providing and laying 1:2:4 cement concrete solid block masonry 4 inch to 6 inch (102 mm to 152) thick using screened graded bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc- complete; foundation and basement masonry upto 5 feet (1.52 Ru-m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level .	100 Cft. Cu.m.	34,638.54 12,232.50
15	Providing and laying 1:12 cement concrete solid block masonry 4 inch to 6 inch (102 mm to 152) thick using screened graded bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level .	100 Cft. Cu.m.	25,504.37 9,006.79
16	Providing and laying 1:9 cement concrete solid block masonry 4 inch to 6 inch (102 mm to 152) thick using screened graded bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level .	100 Cft. Cu.m.	27,658.12 9,767.38
17	Providing and laying 1:8 cement concrete solid block masonry 4 inch to 6 inch (102 mm to 152) thick using screened graded bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level .	100 Cft. Cu.m.	28,721.21 10,142.81
18	Providing and laying 1:7. cement concrete solid block masonry 4 inch to 6 inch (102 mm to 152) thick using screened graded bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 h feet (1.2 Ru.m.) height from ground level .	100 Cft. Cu.m.	30,113.72 10,634.57
19	Providing and laying 1:6 cement concrete solid block masonry 4 inch to 6 inch (102 mm to 152) thick using screened graded bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out Joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level.	100 Cft. Cu.m.	31,957.31 11,285.63
20	Providing and laying 1:5 cement concrete solid block masonry 4 inch to 6 inch (102 mm to 152) thick using screened graded bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level.	100 Cft. Cu.m.	34,548.53 12,200.71

CEMENT CONCRETE SOLID BLOCK MASONRY
SUB-HEAD CODE 110

S. No.	Description	Unit	Rate in Rs.
21	Providing and laying 1:4:8 cement concrete solid block masonry less than 4 inch to 6 inch (102 mm to 152 mm) thick using screened graded bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level.	100 Cft. Cu.m.	32,271.07 11,396.43
22	Providing and laying 1:3:6 cement concrete solid block masonry less than 4 inch to 6 inch (102 mm to 152 mm) thick using screened graded bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out Joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level.	100 Cft. Cu.m.	34,743.72 12,269.64
23	Providing and laying 1:2-1/2:5 cement concrete solid block masonry less than 4 inch to 6 inch (102 mm) thick using screened graded bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc- complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level .	100 Cft. Cu.m.	36,574.14 12,916.05
24	Providing and laying 1:2:4 cement concrete solid block masonry less than 4 inch to 6 inch (102 mm to 152 mm) thick using screened graded bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level .	100 Cft. Cu.m.	38,720.43 13,674.01
25	Providing and laying 1:12 cement concrete solid block masonry less than 4 inch to 6 inch (102 mm to 152 mm) thick using screened graded bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level .	100 Cft. Cu.m.	29,586.27 10,448.30
26	Providing and laying 1:9 cement concrete solid block masonry less than 4 inch to 6 inch (102 mm to 152mm) thick using screened graded bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level .	100 Cft. Cu.m.	31,740.02 11,208.89
27	Providing and laying 1:8 cement concrete solid block masonry less than 4 inch to 6 inch (102 mm to 152 mm) thick using screened graded bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete: foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level .	100 Cft. - Cu.m.	32,803.10 11,584.32

CEMENT CONCRETE SOLID BLOCK MASONRY

SUB-HEAD CODE 110

S. No.	Description	Unit	Rate in Rs.
28	Providing and laying 1:7 cement concrete solid block masonry less than 4 inch to 6 inch (102 mm to 152 mm) thick using screened graded bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level .	100 Cft. Cu.m.	34,178.99 12,070.21
29	Providing and laying 1:6 cement concrete solid block masonry less than 4 inch to 6 inch (102 mm to 152 mm) thick using screened graded bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level .	100 Cft. Cu.m.	36,036.56 12,726.20
30	Providing and laying 1:5 cement concrete solid block masonry less than 4 inch to 6 inch (102 mm to 152 mm) thick using screened graded bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 in foundation, basement and plinth including scaffolding, raking out joints and curing etc. complete; foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level.	100 Cft. Cu.m.	38,641.01 13,645.96
31	Extra for every additional 5 feet (1.52 Ru.m.) depth or part thereof in foundation and basement masonry over items Nos. 1 to 30 .	100 Cft. Cu.m.	603.34 213.07
32	Extra for every additional 4 feet (1.2 Ru.m.) depth or part thereof in plinth masonry over item 1 to 30 .	100 Cft. Cu.m.	869.69 307.13
	WALL IN SUPERSTRUCTURE		
33	Providing and laying 1:4:8 cement concrete solid block masonry more than 6 inches (152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	27,621.80 9,754.56
34	Providing and laying 1:3:6 cement concrete solid block masonry more than 6 inches (152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	30,086.14 10,624.83
35	Providing and laying 1:2-1/2:5 cement concrete solid block masonry more than 6 inches (152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out Joints and curing etc. complete in ground floor super-structure.	100 Cft. Cu.m.	31,916.56 11,271.24
36	Providing and laying 1:2:4 cement concrete solid block masonry more than 6 inches (152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	34,062.85 12,029.19

CEMENT CONCRETE SOLID BLOCK MASONRY
SUB-HEAD CODE 110

S. No.	Description	Unit	Rate in Rs.
37	Providing and laying 1:12 cement concrete solid block masonry more than 6 inches (152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	24,928.69 8,803.49
38	Providing and laying 1:9 cement concrete solid block masonry more than 6 inches (152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	27,082.44 9,564.08
39	Providing and laying 1:8 cement concrete solid block masonry more than 6 inches (152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure .	100 Cft. Cu.m.	28,145.52 9,939.51
40	Providing and laying 1:7 cement concrete solid block masonry more than 6 inches (152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out Joints and curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	29,538.03 10,431.27
41	Providing and laying 1:6 cement concrete solid block masonry more than 6 inches (152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure..	100 Cft. Cu.m.	31,378.98 11,081.39
42	Providing and laying 1:5 cement concrete solid block masonry more than 6 inches (152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	33,972.85 11,997.41
43	Providing and laying 1:4:8 cement concrete solid block masonry 4 to 6 inches (102 mm 152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	29,613.71 10,457.99
44	Providing and laying 1:3:6 cement concrete solid block masonry 4 to 6 inches (102 mm to 152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	32,078.05 11,328.27
45	Providing and laying 1:2-1/2:5 cement concrete solid block masonry 4 to 6 inches (102 mm to 152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	33,908.47 11,974.67

CEMENT CONCRETE SOLID BLOCK MASONRY

SUB-HEAD CODE 110

S. No.	Description	Unit	Rate in Rs.
46	Providing and laying 1:2:4 cement concrete solid block, masonry 4 to 6 inches (102 mm to 152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	36,054.76 12,732.63
47	Providing and laying 1:12 cement concrete solid block masonry 4 to 6 inches (102 mm to 152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	26,920.60 9,506.93
48	Providing and laying 1:9 cement concrete solid block masonry 4 to 6 inches (102 mm to 152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	29,074.35 10,267.52
49	Providing and laying 1:8 cement concrete solid block masonry 4 to 6 inches (102 mm to 152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	30,121.55 10,637.34
50	Providing and laying 1:7 cement concrete solid block masonry 4 to 6 inches (102 mm to 152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	31,529.94 11,134.70
51	Providing and laying 1:6 cement concrete solid block masonry 4 to 6 inches (102 mm to 152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out pints and curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	33,370.89 11,784.83
52	Providing and laying 1:5 cement concrete solid block masonry 4 to 6 inches (102 mm to 152 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	35,964.76 12,700.85
53	Providing and laying 1:4:8 cement concrete solid block masonry less than 4 inches (102 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	33,650.17 11,883.46

CEMENT CONCRETE SOLID BLOCK MASONRY

SUB-HEAD CODE 110

S. No.	Description	Unit	Rate in Rs.
54	Providing and laying 1:3:6 cement concrete solid block masonry less then 4 inches (102 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure .	100 Cft. Cu.m.	36,114.51 12,753.73
55	Providing and laying 1:2-1/2:5 cement concrete solid block masonry less than 4 inches (102 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure .	100 Cft. Cu.m.	37,944.93 13,400.14
56	Providing and laying 1:2:4 cement concrete solid block masonry less than 4 inches (102 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out Joints and curing etc. complete in ground floor superstructure .	100 Cft. Cu.m.	40,091.22 14,158.10
57	Providing and laying 1:12 cement concrete solid block masonry less than 4 inches (102 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure .	100 Cft. Cu.m.	30,957.05 10,932.39
58	Providing and laying 1:9 cement concrete solid block masonry less than 4 inches (102 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure .	100 Cft. Cu.m.	33,110.80 11,692.98
59	Providing and laying 1:8 cement concrete solid block masonry less than 4 inches (102 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure .	100 Cft. Cu.m.	34,173.89 12,068.41
60	Providing and laying 1:7 cement concrete solid block masonry less than 4 inches (102 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure .	100 Cft. Cu.m.	35,566.40 12,560.17
61	Providing and laying 1:6 cement concrete solid block masonry less than 4 inches (102 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure .	100 Cft. Cu.m.	37,407.35 13,210.29
62	Providing and laying 1:5 cement concrete solid block masonry less than 4 inches (102 mm) thick using graded screened bajri 3/4 inch (19 mm) and down gauge set in lime cement mortar 1:1:6 including scaffolding, raking out joints and curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	40,001.21 14,126.31
	PILLARS AND COLUMNS		
63	Extra for masonry of any description in pillars and columns of rectangular or square shape over item Nos. 1 to 62 except 31 & 32 .	100 Cft. Cu.m.	6,764.47 2,388.85

CEMENT CONCRETE SOLID BLOCK MASONRY
SUB-HEAD CODE 110

S. No.	Description	Unit	Rate in Rs.
64	Extra for masonry of any description in columns of 'L' 'T ' cross or tapered sections over item Nos. 1 to 62 except 31 & 32.	100 Cft.	2,182.81
		Cu.m.	770.85
65	Extra for masonry of any description in round pillars and columns over item Nos. 1 to 62 except 31 & 32...	100 Cft.	9,652.98
		Cu.m.	3,408.92
	ARCHES, ARCHITRAVE COPPING AND CORNICE.		
66	Extra for masonry of any description in arches over item Nos. 1 to 62 except 31 & 32 .	100 Cft.	43,716.61
		Cu.m.	15,438.39
67	Extra for masonry of any description in architrave coping and cornice of any shape over item Nos. 1 to 62 except 31 & 32	100 Cft.	12,137.07
		Cu.m.	4,286.17
	STEPS AND STAIRS		
68	Extra for masonry of any description in steps, stairs of approved design over item Nos. 1 to 62 except 31 & 32	100 Cft.	3,233.87
		Cu.m.	1,142.03
	BONDING		
69	Extra for masonry of any description for bonding old and new masonry including making recesses as required in old masonry over items 1 to 62 (except 31 & 32, (actual measurement of new masonry inserted into old masonry be given).	100 Cft.	10,340.31
		Cu.m.	3,651.65
70	Extra for work other than in arches in first floor over item Nos. 33 to 65 and 67 to 69	100 Cft.	1,857.18
		Cu.m.	655.86
71	Extra for work other than in arches in every additional floor above first floor over item Nos. 33 to 65 and 67 to 69 ...	100 Cft.	1,853.50
		Cu.m.	654.56
72	Extra for work in arches in first floor over item No. 66	100 Cft.	2,341.09
		Cu.m.	826.75
73	Extra for work in arches in every additional floor above first floor over item No. 66.	100 Cft.	2,506.63
		Cu.m.	885.21
74	Extra for solid block masonry set in 1:4 cement mortar instead of 1:1:6 lime cement mortar over items 1 to 10 and 68	100 Cft.	59.77
		Cu.m.	21.11
75	Extra for solid block masonry set in 1:4 cement mortar instead of 1:1:6 lime cement mortar over items 11 to 30 and 33 to 64	100 Cft.	47.73
		Cu.m.	16.86
76	Extra for solid block masonry set in 1:4 cement mortar instead of 1:1:6 lime cement mortar over item No. 65 .	100 Cft.	17.02
		Cu.m.	6.01
77	Extra for solid block masonry set in 1:4 cement mortar instead of 1:1:6 lime cement mortar over item No. 66 .	100 Cft.	38.60
		Cu.m.	13.63
78	Extra for solid block masonry set in 1:4 cement mortar instead of 1:1:6 lime cement mortar over item No. 67.	100 Cft.	82.60

CEMENT CONCRETE SOLID BLOCK MASONRY

SUB-HEAD CODE 110

S. No.	Description	Unit	Rate in Rs.
		Cu.m.	29.17
79	Extra for solid block masonry set in 1:4 cement mortar instead of 1:1:6 lime cement mortar over item No. 69 .	100 Cft. Cu.m.	112.06 39.58
80	Extra for solid block masonry set in 1:1:5 lime cement mortar instead of 1:1:6 lime cement mortar over item 1 to 10 and 68	100 Cft. Cu.m.	394.44 139.30
81	Extra for solid block masonry set in 1:1:5 lime cement mortar instead of 1:1:6 lime cement mortar over item 11 to 30 and 33 to 64	100 Cft. Cu.m.	315.01 111.24
82	Extra for solid block masonry set in 1:1:5 lime cement mortar instead of 1:1:6 lime cement mortar over item 65..	100 Cft. Cu.m.	112.31 39.66
83	Extra for solid block masonry set in 1:1:5 lime cement mortar instead of 1:1:6 lime cement mortar over item 66..	100 Cft. Cu.m.	254.74 89.96
84	Extra for solid block masonry set in 1:1:5 lime cement mortar instead of 1:1:6 lime cement mortar over item 67..	100 Cft. Cu.m.	545.10 192.50
85	Extra for solid block masonry set in 1:1:5 lime cement mortar instead of 1:1:6 lime cement mortar over item 69..	100 Cft. Cu.m.	739.58 261.18
86	Extra for solid block masonry set in 1:1:4 lime cement mortar instead of 1:1:6 lime cement mortar over item 1 to 10 and 68	100 Cft. Cu.m.	930.45 328.59
87	Extra for solid block masonry set in 1:1:4 lime cement mortar instead of 1:1:6 lime cement mortar over item 11 to 30 and 33 to 64	100 Cft. Cu.m.	743.07 262.41
88	Extra for solid block masonry set in 1:1:4 lime cement mortar instead of 1:1:6 lime cement mortar over item 66..	100 Cft. Cu.m.	600.92 212.21
89	Extra for solid block masonry set in 1:1:4 lime cement mortar instead of 1:1:6 lime cement mortar over item 67..	100 Cft. Cu.m.	1,285.84 454.09
90	Extra for solid block masonry set in 1:1:4 lime cement mortar instead of 1:1:6 lime cement mortar over item 69..	100 Cft. Cu.m.	1,744.60 616.10
91	Extra if solid cement concrete block moulded by wet process are used instead of ordinary cement concrete solid block on all items of solid block masonry	100 Cft. Cu.m.	(358.30) (126.53)
92	Extra if machine made cement concrete block are used instead of ordinary cement concrete block on all items of solid cement concrete block masonry.	100 Cft. Cu.m.	2,504.06 884.30
93	Add for solid block masonry set in 1:5 cement mortar instead of 1:1:6 lime cement mortar for item Nos. 1 to 10 & 68	100 Cft. Cu.m.	(389.96) (137.71)
94	Add. for solid block masonry set in 1:5 cement mortar instead of 1:1:6 lime cement mortar for item Nos. 11 to 30 and 33 to 64	100 Cft.	(311.43)

CEMENT CONCRETE SOLID BLOCK MASONRY

SUB-HEAD CODE 110

S. No.	Description	Unit	Rate in Rs.
		Cu.m.	(109.98)
95	Add. for solid block masonry set in 1:5 cement mortar instead of 1:1:6 lime cement mortar for item 65	100 Cft. Cu.m.	(111.03) (39.21)
96	Add. for solid block masonry set in 1:5 cement mortar instead of 1:1:6 lime cement mortar for item No. 66 .	100 Cft. Cu.m.	(251.85) (88.94)
97	Add for solid block masonry set in 1:5 cement mortar instead of 1:1:6 lime cement mortar for item No. 67 .	100 Cft. Cu.m.	(538.90) (190.31)
98	Add. for solid block masonry set in 1:5 cement mortar instead of 1:1:6 lime cement mortar for item No, 69	100 Cft. Cu.m.	(365.59) (129.11)
99	Add. for solid block masonry set in 1:6 cement mortar instead of 1:1:6 lime cement mortar for Item 1 to 10 & 68	100 Cft. Cu.m.	389.96 137.71
100	Add, for solid block masonry set in 1:6 cement mortar instead of 1:1:6 lime cemant mortar for Item 11 to 30 and 33 to 64.	100 Cft. Cu.m.	635.41 224.39
101	Add, for solid block masonry set in 1:6 cement mortar instead of 1:1:6 lime cement mortar for item 65.	100 Cft. Cu.m.	226.54 80.00
102	Add. for solid block masonry set in 1:6 cement mortar instead of 1:1:6 lime cement mortar for item 66	100 Cft. Cu.m.	- -
103	Add. for solid block masonry set in 1:6 cement mortar instead of 1:1:6 lime cement mortar for item 67	100 Cft. Cu.m.	- -
104	Add. for solid block masonry set in 1:6 cement mortar instead of 1:1:6 lime cement mortar for item 69	100 Cft. Cu.m.	- -
105	Deduct for solid block masonry set in 1:1:8 lime cement mortar instead of 1:1:6 lime cement mortar for items 1 to 10 and 68	100 Cft. Cu.m.	604.03 213.31
106	Deduct for solid block masonry set in 1:1:8 lime cement mortar instead of 1:1:6 lime cement mortar for items 11 to 30 and 33 to 64	100 Cft. Cu.m.	482.39 170.35
107	Deduct for solid block masonry set in 1:1:8 lime cement mortar instead of 1:1:6 lime cement mortar for item 65	100 Cft. Cu.m.	171.98 60.73
	Deduct for solid block masonry set in 1:1:8 lime cement mortar instead of 1:1:6 lime cement mortar for item 66.	100 Cft. Cu.m.	390.10 137.76
109	Deduct for solid block masonry set in 1:1:8 lime cement mortar instead of 1:1:6 lime cement mortar for item 67 .	100 Cft. Cu.m.	834.74 294.79
110	Deduct for solid block masonry set in 1:1:8 lime cement mortar instead of 1:1:6 lime cement mortar for item 69 .	100 Cft. Cu.m.	1,132.56 399.96

CEMENT CONCRETE HOLLOW BLOCK MASONRY WALLS IN BASEMENT AND SUPERSTRUCTURE

Code 111

Hollow Block Masonry (SH-111)

Brief Specification

(1) Regular concrete blocks: These are precast cement concrete blocks made from dense aggregates and intended for load bearing walls.

(2) Light weight concrete units: Light weight aggregates are used in the construction of these units and although they are not as strong as the heavy concrete blocks, yet they are extensively used for both load bearing and non-load bearing walls.

Concrete block masonry can be built in various sizes depending upon the job requirement. There is also no standard size of concrete blocks. The face thickness should not be less than 5 cm and the net area should be at least 55 to 60 per cent of the gross area. Strengthening of the block in the middle, where cracking is liable to take place, is necessary. It is recommended that the cores should be at least two in number and they should preferably be oval-shaped. The common sizes for building blocks are given in the table below:

Type	Actual dimensions in cm		
	Length	Breadth	Height
Size A	39	30	19
Size B	39	20	19
Size C	39	10	19
Tolerance	±3 mm	±1.5 mm	±1.5 mm

Manufacture of concrete blocks.

The manufacture of concrete blocks is similar to that of ordinary concrete masonry. However, the following points regarding the manufacture of these blocks should be noted:

(1) The aggregates should be correctly graded. The mixture of fine aggregates (60%) and coarse aggregates 6 to 12 mm size (40%) is used. The fineness modulus of the mixture should vary between 2.9 to 3.6. Use of fine sand should be avoided.

(2) The concrete mix should be at least of 1: 6 cement to combined aggregate ratio.

(3) When hand moulding is resorted to, the hollows should be vertical to get better compaction. The concrete should not have a very lean consistency. The concrete block should be taken out from the mould just at the time when it has sufficiently set.

(4) The block should not be disturbed on the moulding plat form for at least 24 hours.

(5) It is preferable to use machines for casting the blocks so that a better finish and strength can be obtained.

(1) The blocks should be cured after keeping them under shade for at least 24 hours so that they are protected from the action of wind and sun during this period.

Laying of concrete masonry.

Walls

It is essential to cheek whether any cutting of blocks in necessary or not because concrete blocks are available in definite sizes. This is done by laying a course of blocks without any mortar and fitting the same within the desired length of the wall. The blocks should be laid with proper clearance to allow for mortar joints.

Next a mortar bed is spread on the foundation concrete and is leveled to have sufficient but uniform thickness of mortar everywhere. The corner block is laid first and placed in position accurately. Mortar is applied to the ends of the other blocks and are placed and pushed against the corner block in turn. After a few blocks are laid, the level of the course is checked. The level and verticality of the first course is checked carefully so that the upper courses are brought up regularly in line and level with it.

The succeeding courses are laid in such a manner so as to break the joints vertically. Mortar is applied to the bottom of the concrete block at the horizontal face members only. For vertical joints, the mortar is applied to the projections at the sides of the block. For building the portion in between the corners, a chord is spread between the two horizontal end blocks of a course and the blocks are laid in between, as described above. Mortar should not be spread for longer distances ahead of the block which is being laid so that it may not get dried when the block at that particular position is fitted. Excess mortar is trowelled off from the face of the joint. The final closing block is fitted carefully. All the four vertical edges of the block and the edges of the opening are covered with mortar. This block is then pushed into the opening and fitted into place.

The following points should be noted for the construction of walls and corners in addition to what has been described above.

i) Only well dried blocks should be used in the construction. The blocks should not be drenched in water before laying in the walls. Only sides of the joints should be slightly wetted.

ii) Blocks for this work should have less than 10 per cent absorption for external is and less than 15 per cent for internal walls. When blocks with higher water absorption are to be used, they should be painted with water proof materials.

iii) The mortar used shall not be stronger than the concrete mix used for the manufacture of blocks. Cement, lime and sand mortar of 1: 1: 10 mix is preferable.

iv) The joints should be about 5 mm to 1 cm in thickness.

v) When the difference in the height of two adjacent walls is more, e.g., when a main wall meets a compound wall, the two walls should be separated by a joint.

vi) The corners of hollow concrete, block walls crack due to thermal expansion. In the case of long walls there will be cracks in the centre of the wall. Solid concrete blocks or hollow blocks filled with concrete are used at the junction of walls to avoid cracking.

Expansion Joints.

The masonry is liable to crack due to unequal stresses crcated on account of the expansion and contraction of the block. Hence controlled joints are introduced at definite intervals (5 to 10 metre).

PAKISTAN PUBLIC WORKS DEPARTMENT

CEMENT CONCRETE HOLLOW BLOCK MASONRY

SUB-HEAD CODE 111

S. No.	Description	Unit	Rate in Rs.
	WALLS IN BASEMENT AND SUPERSTRUCTURE		
1	Providing and laying 1:3:6 cement concrete hollow block masonry of any thickness using graded screened bajri 1/2 inch (13 mm) and down gauge set in cement mortar 1:6 including scaffolding, raking, out Joints and curing etc. complete in basement and ground floor superstructure.	100 Cft. Cu.m.	20,678.88 7,302.68
2	Providing and laying 1:2-1/2:5 cement concrete hollow block masonry of any thickness using graded screened bajri 1/2 inch (13 mm) and down gauge set in cement mortar 1:6 including scaffolding, raking, out joints and curing etc. complete in basement and ground floor superstructure .	100 Cft. Cu.m.	23,842.89 8,420.04
3	Providing and laying 1:2:4 cement concrete hollow block masonry of any thickness using graded screened bajri 1 /2 inch (13 mm) and down gauge set in cement mortar 1:6 including scaffolding, raking, out joints and curing etc. complete in basement and ground floor superstructure .	100 Cft. Cu.m.	24,920.01 8,800.43
4	Providing and laying 1:9 cement concrete hollow block masonry of any thickness using graded screened bajri 1/2 inch (13 mm) and down gauge set in cement mortar 1:6 including scaffolding, raking, out joints and curing etc. complete in basement and ground floor superstructure.	100 Cft. Cu.m.	20,855.93 7,365.21
5	Providing and laying 1:8 cement concrete hollow block masonry of any thickness using graded screened bajri 1/2 inch (13 mm) and down gauge set in cement mortar 1:6 including scaffolding, raking, out joints and curing etc. complete in basement and ground floor superstructure.	100 Cft. Cu.m.	21,478.89 7,585.21
6	Providing and laying 1:7 cement concrete hollow block masonry of any thickness using graded screened bajri 1 /2 inch (13 mm) and down gauge set in cement mortar 1:6 Including scaffolding, raking, out joints and curing etc. complete In basement and ground floor superstructure	100 Cft. Cu.m.	22,306.62 7,877.52
7	Providing and laying 1:6 cement concrete hollow block masonry of any thickness using graded screened bajri 1 /2 Inch (13 mm) and down gauge set in cement mortar 1:6 Including scaffolding, raking, Out Joints and curing etc, complete in basement and ground floor superstructure.	100 Cft. Cu.m.	23,388.97 8,259.75
8	Providing and laying 1:5 cement concrete hollow block masonry of any thickness using graded screened bajri 1 /2 inch (13 mm) and down gauge set in cement mortar 1:6 Including scaffolding, raking, out Joints and curing etc, complete in basement and ground floor superstructure.	100 Cft. Cu.m.	24,925.42 8,802.34
9	Extra for hollow block masonry in first floor superstructure on item Nos. 1 to 8 .	100 Cft. Cu.m.	1,311.82 463.27
10	Extra for hollow block masonry in superstructure for every additional floor above first floor on items 1 to 8 .	100 Cft. Cu.m.	882.83 311.77

CEMENT CONCRETE HOLLOW BLOCK MASONRY
SUB-HEAD CODE 111

S. No.	Description	Unit	Rate in Rs.
11	Extra for hollow block masonry in superstructure set in 1:5 cement mortar instead of 1:6 cement mortar on item 1 to 8 .	100 Cft. Cu.m.	257.25 90.85
12	Extra for hollow block masonry in superstructure set in 1:4 cement mortar instead of 1:6 cement mortar on item 1 to 8 .	100 Cft. Cu.m.	542.43 191.56
13	Extra for hollow block masonry in superstructure set in 1:3 cement mortar instead of 1:6 cement mortar on items 1 to 8.	100 Cft. Cu.m.	1,051.11 371.20
14	Deduct extra for hollow block masonry in superstructure set in 1:1:6 (1 cement: 1 lime and 6 sand) cement lime mortar instead of 1:6 cement mortar on items 1 to 8 .	100 Cft. Cu.m.	504.53 178.17
15	Extra for hollow block masonry in superstructure set in 1:1:5 (1 cement: 1 lime and 5 sand) cement lime mortar instead of 1:6 cement mortar on item Nos. 1 to 8 .	100 Cft. Cu.m.	754.65 266.50
16	Extra for hollow block masonry in superstructure set in 1:1:4 (1 cement: 1 lime and 4 sand) cement lime mortar instead of 1:6 cement mortar on item Nos 1 to 8).	100 Cft. Cu.m.	1,094.54 386.53
17	Deduct for hollow block masonry in superstructure set in 1:1:8 (1 cement: 1 lime and 8 sand) cement lime mortar instead of 1:6 cement mortar on item Nos. 1 to 8	100 Cft. Cu.m.	383.02 135.26
18	Extra if hollow cement concrete blocks moulded by wet process are used instead of ordinary cement concrete hollow block on all items of hollow block masonry	100 Cft. Cu.m.	4,048.30 1,429.65
19	Extra if machine made cement concrete hollow blocks are used instead of ordinary hollow cement concrete blocks on all items of hollow cement concrete block masonry .	100 Cft. Cu.m.	2,536.88 895.89

BRICK MASONRY

Code 112

BRICK MASONRY (SH-112)

Brief *Specifications*

(A) **Bricks:-**

(a) GENERAL

A good clay brick should have a fine, compact and uniform texture. It should be sound, hard and well burnt and should give a metallic tinkle when struck with a hammer or another brick. It should be uniform in color and free from cracks, holes, air bubbles, lumps, pebbles, stones and particles of lime etc. It should not contain soluble salts in excess of 0.5%.

(b) FIRST CLASS BRICK

The size of bricks shall be specified as per Specification book. They shall be well burnt without being vitrified. They shall be of uniform colour, regular in shape and size, with sharp and square corners and parallel faces. They must be homogeneous in texture and emit a clear ringing sound when struck. They shall be free from flaws and cracks. They shall not absorb water weighing more than 1/6th of their own weight after being soaked for one hour, and shall show no signs of efflorescence on drying; compressive strength shall not be less than 6,000 Lbs. per square inch. for mechanical plant manufactured bricks and 2,000 lbs/sq. inch for manually moulded. Bricks.

(c) SECOND CLASS BRICKS.

Second class bricks shall be as well burnt as first class, or slightly over burnt but not vitrified in any part and must give a clear ringing sound when struck. In this class of bricks slight irregularities in size, shape or colour will be accepted but not such as to give irregular or uneven courses when used. Second class bricks may have slight chips or flaws. They shall not absorb more than 1/4th their weight of water after one hours immersion. Their compressive strength shall not be less than 2000 lbs. per square inch.

(B) **Size of Bricks:-**

a)	Traditional size for building use.	9" x 4-3/8" x 2-11/16" (228mm x 111mm x 68mm)
b)	Modular bricks having size.	7-5/8" x 3-5/8" x 3-5/8" (193mm x 92mm x 92mm)
c)	Bricks size for soling work.	9" x 4-1/2" x 3" (228mm x 114mm x 76mm)

(C) **Cement:-**

a) The cement shall be Portland ordinary normal setting, of any brand complying in all respect with BS No. 12.

b) Cement unless otherwise specified to be of any particular quality, shall means ordinary setting cement.

c) Sulphate resisting cement shall comply manufacturer specification.

Sand:-

Sand shall be sharp, cubical, hard, dense and whole of which pass through 3/16" inches / 5mm sieve and 2 to 10% through sieve No. 100. It should be free from organic impurities and clay lumps.

(E) Water:-

Water shall be free from earth, vegetable, organic and inorganic impurities particularly the sulphates/salts. Water should generally be fit for drinking P.H. value of water shall range between 6 and 8.

(F) **Mortar**

Shall be prepared in proportion given in item of work in a manner detailed in chapter for Mortar.

(G) **Brick Work:-**

1. All burnt bricks to be thoroughly soaked in water before being laid in cement mortar. Burnt bricks build in mud mortar will only be dipped in water before use. The joints of bricks work shall not exceed 3/8 inch / 10mm in thickness and 4 courses including four mortar joints are not to exceed 12.25" inches / 311mm in height when traditional size of bricks are used..
2. Wall are always to be carried up regularly along their entire length and throughout the building unless other wise directed by the Engineer-In-Charge.
3. No section of brick work is permitted to be 4 feet/1m, lower than any other section.
4. Unless otherwise specified the bond shall be English and no half bricks or bricks bats shall be used than those necessary to complete the bond.
5. Each course of bricks is laid quite level and perfect in bond with the frog on top, that every brick is well bedded and flushed solid in mortar. All horizontal and vertical joints shall be filled up completely.
6. When the face work, or a portion of face work is completed, the exposed masonry shall be scrubbed, from top to bottom with fiber bristle brushes and clean water.

7. Joints of brick work will be struck cleaned and the same motor pressed while the brick work proceeds using additional mortar if required. Raking out joints will not be done.

8. Pointing the brick work will be a separate process including raking of joints and using different mortar from that of brick work. Pointing will not be done in the same mortar.

9. The joints on faces which are to be plastered or pointed, should be racked 3/8 inches/ 10mm deep while the mortar is green but not later that 24 hours after the brick work is done.

   The pointing or striking out joints will normally be adopted as follows:-

   i) Flush pointing with cement mortar be used on both faces of wall built in mud.
   ii) Weather struck joints/pointing will generally be adopted for pillars fire places of other ornamental work/faces required both internally or externally where so ordered.
   iii) Tuck pointing will be done on surfaces, specially ordered by the Engineer In- Charge.

10. When new and old work have to be joined together in brick work, the old work must be well cleaned and thoroughly watered before the new work is commenced.

11. All new work in cement mortar will be kept constantly moist during the masonry work in progress. The brick masonry shall be cured for at least 7 days. The brick work being kept wet all the time, by spraying with water.

(G) Brick Work In Arches:-

1. The Arches shall be constructed true to radius or rigid centering with 1/8" inch variation permitted. Arches shall be constructed in segments day by day as per construction drawings.

2. The joints of all the bricks in each course shall be laid readily and bricks shall be cut to ensure uniformity in the width of the joints.

3. Brick work adjoining the arches shall be built level with the arch construction, course following by not more than four courses, so that the arch is not under load at any stage of construction.

4. Where arches are reinforced, the grout shall be poured in stages as each segment is built.

(H) Cavity Walls:-

1. The Cavity shall commenced two courses below ground level DPC, and in the bottom course of the outer skin.

2. Every fourth vertical joint shall be kept open to allow any moisture which might collect in the cavity to escape.

3. The cavity shall be carried on up to the level 6" inches/152mm below or two courses from the bottom of the roof slab.

1. The cavity wall brick masonry shall be laid in stretcher bond unless other wise specified.
2. Metal wall ties shall be spaced in a staggered manner with a minimum spacing of 3 feet (0914) on horizontally and 18" inches (46cm) vertically.
3. The curing of cavity wall shall be done carefully so that no water finds its way inside the cavity.

(I) Reinforced Brick Masonry:-

1. Reinforced brick walls shall be constructed of two faces/leaves with gap between for reinforcement and grout. All courses shall be stretchers or as specified.
2. Two faces/leaves shall be tied together with Z-shaped metal ties spaced 24" inches (61cm) on centre horizontally, and located vertically at every third joint of stretchers.
3. Ties shall be made of ^{1}A inch / 6mm diameter steel reinforcing bars with a 2" inches (51mm) portion bent at right angles in opposite directions at each other and straight centre portion of approximately 2" inches (51mm) less in length than wall thickness.
4. For 9" inches (229mm) wall thickness, 3/8" inch (10mm) diameter horizontally bars will be placed at 10" inches (254mm) c/c and vertical bars $^{1}/2^{lf}$ inch (12mm) diameter will be placed at 24" inches (610mm) c/c.
5. Vertical reinforcement at jambs of opening and at ends of walls shall be doubled. Horizontal reinforcement above and below all opening shall also be doubled.
6. Reinforcement shall be continuous. Bars may be furnished in any convenient lengths.
7. All splices shall be lapped at least 14" (356mm) for 3/8" inches (10mm) diameter bars and at least 18" inches (457mm) for $^{1}/2^{tf}$ inches (12mm) diameter bars and horizontal reinforcement shall be bent around corners.
8. Fill cavity by pouring in grout. Do not grout until 6 hours after wall is laid. Fill to the level of metal.
9. No mortar shall be placed or allowed to remain in the grout space.

(J) Partition Walls:-

1. Brick masonry partition walls shall be one brick thicker either flat or on edge.
2. The partition walls shall be set in cement mortar not less than 1:3 proportions unless otherwise specified.

3. Total height of wall in one day shall not exceed 4 feet (1.22 meter), workmanship shall be of best quality as due to the small thickness of wall great care is to be taken.
4. All brick masonry partition walls shall be bonded with the colours in case of R.C.C. frame structure.

BONDING OF BRICK MASONRY PARTITION WALLS WITH RCC FRAMES

METHOD OF BONDING

All brick masonry partition walls shall be bonded with the columns of the R.C.C frame by providing ¼" dia. reinforcement protruding out of the columns at every 12". The length of the bonding bars shall not be less than 12" with a hook of 1" dia. at the end and these bonding reinforcements shall be provided and paid for alongwith the main reinforcement of the columns and allowed to extend out through the holes provided in the form works for the columns.

PAKISTAN PUBLIC WORKS DEPARTMENT

BRICK MASONRY

SUB-HEAD CODE 112

S. No.	Description	Unit	Rate in Rs.
	FOUNDATION, BASEMENT AND PLINTH		
1	Providing and laying first class solid burnt brick masonry set in cement mortar 1:6 in straight or curved walls more than 13-1/2 inches (343 mm) thick including scaffolding, raking out Joints and curing etc. Complete in foundation, basement and plinth (foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level) .	100 Cft. Cu.m.	36,129.72 12,759.10
2	Providing and laying first class solid burnt brick masonry set in cement mortar 1:6 in straight or curved walls 9" to 13-/2 inches (228 mm to 343 mm) thick including scaffolding, raking out Joints and curing etc. complete in foundation, basement and plinth (foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level) .	100 Cft. Cu.m.	38,582.85 13,625.42
3	Providing and laying first class solid burnt brick masonry set in cement mortar 1:6 in straight or curved wall 4-1/2 inches (114 mm) or less thickness including scaffolding, raking out joints and curing etc, complete in foundation, basement and plinth (foundation and basement masonry upto 5 (1.52 Ru.m.) feet depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level) .	100 Cft. Cu.m.	42,146.60 14,883.94
4	Providing and laying first class solid burnt brick ;masonry set in mud mortar in straight or curved walls more that 13-1/2 inches (343 mm) thick including scaffolding and raking out joints etc. Complete in foundation, basement and plinth (foundation and basement masonry upto 5 (1.52 Ru.m.) feet depth and plinth upto 4 feet (1.2 Ru.m) height from ground level.	100 Cft. Cu.m.	32,839.27 11,597.09
5	Providing and laying first class solid burnt brick masonry set in mud mortar in straight or curved walls 9 to 13-1/2 (228 mm) inches thick including scaffolding and raking out Joints and curing etc. complete in foundation, basement and plinth (foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level .	100 Cft. Cu.m.	35,292.39 12,463.40
6	Providing and laying first class solid burnt brick masonry set in mud mortar in straight or curved walls 4-1/2 inches (11 mm) and less in thickness including scaffolding and raking out joints and curing etc. complete in foundation, basement and plinth (foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level) .	100 Cft. Cu.m.	38,042.39 13,434.56

BRICK MASONRY

SUB-HEAD CODE 112

S. No.	Description	Unit	Rate in Rs.
7	Providing and laying sundried bricks masonry set in mud mortar in straight or curved walls more than 13-1/2 inches (343 mm) thick including scaffolding raking out joints etc. complete in foundation in basement and plinth (foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level.	100 Cft.	21,806.45
		Cu.m.	7,700.88
8	Providing and laying sundried brick masonry set in mud mortar in straight or curved walls 9 to 13-1/2 inches 228 mm) to 343 mm) thick including scaffolding raking out Joints etc. complete in foundation, basement and plinth (foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level),.	100 Cft.	29,711.19
		Cu.m.	10,492.42
9	Providing and laying sundried brick masonry set in mud mortar in straight or curved walls 4-1/2 inches (114 mm) and less in thickness including scaffolding raking out joints etc. complete in foundation basement and plinth (foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level).	100 Cft.	32,461.19
		Cu.m.	11,463.57
	ARCHES IN FOUNDATION. BASEMENT AND PLINTH		
10	Providing and laying first class solid burnt brick masonry set in cement mortar 1:6 for arches on straight or curved walls more than 13-1/2 (343 mm) thick including scaffolding form work and its removal raking out joints and curing etc. complete in foundation, basement and plinth (foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level) .	100 Cft.	60,444.99
		Cu.m.	21,345.97
11	Providing and laying first class solid burnt brick masonry set in cement mortar 1:6 for arches on straight or curved walls 9" to 13-1/2 inches (228 mm to 343 mm) thick including scaffolding, from work and its removal raking out joints and curing etc. complete in foundation basement and plinth (foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level) .	100 Cft.	60,695.52
		Cu.m.	21,434.44
12	Providing and laying first class solid burnt brick masonry set in cement mortar 1:6 for arches on straight or curved walls 4-1/2 inches (114 mm) and less in thickness including scaffolding, form work and its removal, raking out Joints and curing etc. complete in foundation, basement and plinth (foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1,2 Ru.m.) height from ground level).	100 Cft.	72,592.17
		Cu.m.	25,635.71
13	Providing and laying second class solid burnt brick masonry set in cement mortar 1:6 for arches on straight or curved walls more than 13-1/2 inches (343 mm) thick including scaffolding, form work and its removal, raking out joints and curing etc. complete in foundations, basement and plinth (foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level .	100 Cft.	57,727.58
		Cu.m.	20,386.32

BRICK MASONRY
SUB-HEAD CODE 112

S. No.	Description	Unit	Rate in Rs.
14	Providing and laying second class solid burnt brick masonry set in cement mortar 1:6 for arches on straight or curved wall 9" to 13-1/2 inches(228 mm to 343 mm) thick including scaffolding, form work and its removal, raking out joints and curing etc, complete in foundation basement and plinth (foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m,) height from ground level)	100 Cft. Cu.m.	58,207.45 20,555.79
15	Providing and laying second class solid burnt brick masonry set in cement mortar 1:6 for arches on straight or curved wall 4-1/2 inches (114 mm) or less in thickness including scaffolding, form work and its removal raking out joints and curing etc. complete in foundation basement and plinth (foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level)	100 Cft. Cu.m.	69,927.88 24,694.82
16	Providing and laying first class solid burnt brick tile masonry set in cement mortar 1:6 for arches on straight or curved walls more than 9" (228 mm) thick including scaffolding, form work and its removal raking out joints and curing etc. complete in foundation basement and plinth (foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level) .	100 Cft. Cu.m.	100,189.71 35,381.70
17	Providing and laying first class solid burnt brick tile masonry set in cement mortar 1:6 for arches on straight or curved walls upto 9 inches (228 mm) thick including scaffolding, form work and its removal raking out joints and curing etc. complete in basement and plinth (foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level).	100 Cft. Cu.m.	100,877.09 35,624.44
18	Providing and laying second class solid burnt brick tile masonry set in cement mortar 1:6 for arches on straight or curved walls more than 9 inches (228 mm) thick including scaffolding, form work and its removal raking out joints and curing etc. complete in foundation, basement and plinth (foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level)	100 Cft. Cu.m.	94,395.96 33,335.65
19	Providing and laying second class solid burnt bricks tile masonry set in cement mortar 1:6 for arches on straight or curved walls upto 9" (229 mm) thick including scaffolding form work and its removal raking, out joints and curing etc. complete in foundation basement and plinth (foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level .	100 Cft. Cu.m.	95,058.34 33,569.57
20	Extra for every additional 5 feet (1.52 Ru.m.) depth or part thereof in foundation and basement masonry over items 1 to 9	100 Cft. Cu.m.	1,281.45 452.54
21	Extra for every additional 4 feet (1.2 Ru.m.) height or part thereof in plinth over items 1 to 9	100 Cft. Cu.m.	981.01 346.44

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S. No.	Description	Unit	Rate in Rs.
22	Extra for every additional 5 feet (1.52 Ru.m) depth or part thereof for arch masonry in foundation and basement over items 10 to 19	100 Cft. Cu.m.	1,679.92 593.26
23	Extra for every additional 4 feet (1.2 Ru.m.) height or part thereof for arch masonry in plinth over items 10 to 19 .	100 Cft. Cu.m.	1,379.48 487.16
	MASONRY IN SUPERSTRUCTURE		
24	Providing and laying first class solid burnt brick masonry set in cement mortar 1:6 in straight or curved wall more than 13-1/2 inches (343 mm) thick including scaffolding, raking, out joint and curing etc. complete in ground floor superstructure .	100 Cft. Cu.m.	34,527.22 12,193.19
25	Providing and laying first class solid burnt brick masonry set in cement mortar 1:6 in straight or curved walls 9 to 13-1/2 inches (229 mm to 343 mm) thick including scaffolding, raking, out joints and curing etc. complete in ground floor superstructure .	100 Cft. Cu.m.	41,260.97 14,571.19
26	Providing and laying first class solid burnt brick masonry set in cement mortar 1:6 in straight or curved walls 4-1/2 inches (114 mm) and less in thickness including scaffolding, raking, out joints and curing etc. complete in ground floor superstructure .	100 Cft. Cu.m.	44,318.47 15,650.94
27	Providing and laying first class solid burnt brick masonry set in mud mortar in straight or curved walls more than 13-1/2 inches (343 mm) thickness including scaffolding, raking, out joints, curing etc. complete in ground floor superstructure .	100 Cft. Cu.m.	35,875.52 12,669.33
28	Providing and laying first class solid burnt brick masonry set in mud mortar in straight or curved walls 9" to 13-1/2 inches (228 mm to 343 mm) thickness including scaffolding, raking, out joints, curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	38,450.52 13,578.68
29	Providing and laying first class solid burnt brick masonry set in mud mortar in straight or curved walls 4-1/2 inches (114 mm)and less in thickness including scaffolding, raking, out joints, curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	41,508.02 14,658.43
30	Providing and laying sundried brick masonry set in mud mortar in straight or curved walls more than 13-1/2 inches (343 mm) thickness including scaffolding, raking, out Joints, curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	29,901.82 10,559.74
31	Providing and laying sundried brick masonry set in mud mortar in straight or curved walls 9" to 13-1/2 inches (229 mm to 343 mm) thickness including scaffolding, raking, out Joints, curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	31,886.19 11,260.51

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S. No.	Description	Unit	Rate in Rs.
32	Providing and laying sundried brick masonry set in mud mortar in straight or curved walls 4-1/2 inches (114 mm) and less in thickness including scaffolding, raking, out joints, curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	34,636.19 12,231.67
	PILLARS AND COLUMNS		
33	Extra for masonry of any description in pillars and columns of rectangular or square shape over item Nos. 1,2,4,5, 7,8, 24. 25, 27, 28, 30, and 31	100 Cft. Cu.m.	10,609.38 3,746.67
34	Extra for masonry of any description in pillars and columns of round shape over item Nos. 1, 2, 4, 5, 24, 25, 27 and 28..	100 Cft. Cu.m.	13,771.65 4,863.42
35	Extra for masonry of any description in pillars and columns of 'L' T cross or tapered section over item Nos. 1,2,4,5, 24, 25,27, and 28	100 Cft. Cu.m.	10,952.43 3,867.82
36	Extra for masonry of any description in steps of approved design over item No. 1 to 9 and 24 to 32	100 Cft. Cu.m.	3,695.00 1,304.88
	BONDING OLD AND NEW MASONRY		
37	Extra for masonry of any description for bonding old and new masonry including making recesses as required in old masonry over item Nos. 1 to 9 & 24 to 32 (actual measurement of new masonry inserted into old masonry to be given) .	100 Cft. Cu.m.	16,568.19 5,851.01
	ARCHES IN SUPERSTRUCTURE		
38	Providing and laying first class solid burnt brick masonry set in cement mortar 1:6 for arches in straight or curved walls more than 13-1/2 inches (343 mm) thick including scaffolding, from work and its removal, raking, out joints, and curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	64,583.74 22,807.56
39	Providing and laying first class solid burnt brick masonry set in cement mortar 1:6 for arches in straight or curved walls 9" to 13-1/2 inches (229 mm to 343 mm) thick including scaffolding, form work and its removal, raking, out joints, and curing etc, Complete in ground floor superstructure.,	100 Cft. Cu.m.	67,517.55 23,843.62
40	Providing and laying first class solid burnt brick masonry set in cement mortar 1:6 for arches in straight walls 4-1/2 inches(114 mm) and less in thickness including scaffolding, from work and its removal, raking, out Joints and curing etc. Complete in ground floor superstructure	100 Cft. Cu.m.	74,370.92 26,263.87
41	Providing and laying second class solid burnt brick masonry set in cement mortar 1:6 for arches in straight or curved walls more than 13-1/2 inches (343 mm) thick^ Including scaffolding form work and its removal, raking, out joints and curing etc, Complete In ground floor supertructure	100 Cft. Cu.m.	61,885.08 21,854.53

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S. No.	Description	Unit	Rate in Rs.
42	Providing and laying second class solid burnt brick masonry set in cement mortar 1:6 for arches in straight walls 9 inches to 13-1/2 inches (229 mm) or less in thickness including scaffolding, form work and its removal, raking, out joints and curing etc. complete in ground floor superstructure..	100 Cft. Cu.m.	64,472.45 22,768.25
43	Providing and laying second class solid burnt brick masonry set in cement mortar 1:6 for arches in straight walls 4-1/2 inches (114 mm) or less in thickness including scaffolding, form work and its removal, raking, out joints and curing etc. complete in ground floor superstructure..	100 Cft. Cu.m.	71,706.63 25,322.98
44	Providing and laying first class solid burnt brick tile masonry set in cement mortar 1:6 for arches in straight or curved walls more than 9 inches (229 mm) thick including scaffolding, form work and its removal raking, out joints and curing etc. complete in ground floor superstructure...	100 Cft. Cu.m.	104,662.84 36,961.37
45	Providing and laying first class solid burnt brick tile masonry set in cement mortar 1:6 for arches in straight or curved walls upto 9 inches in (229 mm) thick including scaffolding, form work and its removal, raking, out joints and curing etc. complete in ground floor super-structure	100 Cft. Cu.m.	107,552.09 37,981.70
46	Providing and laying second class solid burnt brick tile masonry set in cement mortar 1:6 for arches in straight or curved walls more than 9 inches (229 mm) thick including scaffolding, form work and its removal, raking, out joints and curing etc. complete in ground floor superstructure	100 Cft. Cu.m.	99,058.63 34,982.26
47	Providing and laying second burnt brick tile masonry set in cement mortar 1:6 for arches in straight or curved walls upto 9 inches (229 mm) thick including scaffolding, form work and its removal, raking, out joints and curing etc. complete in ground floor superstructure	100 Cft. Cu.m.	101,866.63 35,973.90
	HONEY-COMB WORK IN SUPERSTRUCTURE		
48	Providing and laying first class solid burnt brick honeycomb masonry set in cement mortar 1:6 in straight or curved walls 9 inches (229 mm) thick including scaffolding, raking, out joints where required and curing etc. complete in ground floor superstructure. (Hollows not to be deducted for the purpose of measurement).	100 Cft. Cu.m.	21,947.78 7,750.79
49	Providing and laying first class solid burnt brick honey comb masonry set in cement mortar 1:6 in straight or Curved walls 4-1/2 inches (114 mm) thick or less including scaffolding, raking, out joints were required and curing etc. complete in ground floor superstructure. (Hollows not to be deducted for the purpose or measurement).	100 Cft. Cu.m.	20,991.55 7,413.10
50	Deduct if second class bricks are used in honey comb work from item No. 48 & 49 .	100 Cft. Cu.m.	1,631.25 576.07

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S. No.	Description	Unit	Rate in Rs.
	ARCHITRAVES, COPING AND CORNICE ETC. IN SUPERSTRUCTURE		
51	Providing and laying first class solid burnt brick masonry set in cement mortar 1:6 in 9 inches (229 mm) thick and above architraves of required shape in straight or curved walls including cutting brick to required shape scaffolding, raking, out joints and curing etc. complete in ground floor superstructure	100 Cft. Cu.m.	55,701.38 19,670.77
52	Providing and laying first class solid burnt brick masonry set in cement mortar 1:6 in less then 9 inches (229 mm) thick architraves of required shape in straight or curved walls including cutting bricks to required shape scaffolding, raking, out joints and curing etc. complete in ground floor superstructure	100 Cft. Cu.m.	58,151.38 20,535.98
53	Providing and laying first class solid burnt brick tile masonry set in cement mortar 1:6 in 9 inches (229 mm) thick and above architraves of required shape in straight or curved walls including cutting tiles to required shape scaffolding, raking, out joints and curing etc. complete in ground floor superstructure.	100 Cft. Cu.m.	89,247.43 31,517.46
54	Providing and laying first class burnt brick tile masonry set in cement mortar 1:6 in less than 9 inches (229 mm) thick architraves of required shape in straight of curved walls including cutting tiles to required shape, scaffolding, raking, out joints and curing etc, complete in ground floor superstructure .	100 Cft. Cu.m.	92,300.56 32,595.66
55	Providing and laying second class burnt brick tile masonry set in cement mortar 1:6 in 9 inches (229 mm) thick and above architraves of required shape in straight of curved walls including cutting tiles to required shape, scaffolding, raking out joints and curing etc. complete in ground floor superstructure	100 Cft. Cu.m.	80,334.93 28,370.04
56	Providing and laying second class burnt brick tile masonry set in cement mortar 1:6 in less than 9 inches (229 mm) thick and above architraves of required shape in straight of curved walls including cutting tiles to required shape, scaffolding, raking, out joints and curing etc. complete in ground floor superstructure	100 Cft. Cu.m.	83,369.31 29,441.62
57	Providing and laying first class solid burnt brick masonry set in cement mortar 1:6 in 9 inches (229 mm) thick and above coping of required shape in straight or curved walls including cutting bricks to required shape making drip, scaffolding, raking, out Joints and curing etc. complete in ground floor superstructure .	100 Cft. Cu.m.	51,363.41 18,138.83
58	Providing and laying first class solid burnt brick masonry set in cement mortar 1:6 in less than 9 inches (229 mm) thick coping of required shape in straight or curved walls Including cutting bricks to required shape making drip, scaffolding, raking, out joints and curing etc, complete In ground floor superstructure .	100 Cft. Cu.m.	52,885.28 18,676.28

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S. No.	Description	Unit	Rate in Rs.
59	Providing and laying first class solid burnt brick tile masonry set in cement mortar 1:6 in 9 inches (229 mm) thick and above coping of required shape in straight or curved walls including cutting tile to required shape making drip, scaffolding, raking, out Joints and curing etc. complete in ground floor superstructure	100 Cft. Cu.m.	84,599.24 29,875.97
60	Providing and laying first class solid burnt brick tile masonry set in cement mortar 1:6 in less than 9 inches (229 mm) thick coping of required shape in straight or curved walls including cutting tile to required shape making drip, scaffolding, raking, out Joints and etc. complete in ground floor superstructure	100 Cft. Cu.m.	89,779.24 31,705.27
61	Providing and laying second class solid burnt brick tile masonry set in cement mortar 1:6 in 9 inches (229 mm) thick and above coping of required shape in straight or curved walls including cutting tiles to required shape making drip, scaffolding, raking, out joints and curing etc. complete in ground floor superstructure .	100 Cft. Cu.m.	77,829.24 27,485.16
62	Providing and laying second class solid burnt brick tile masonry set in cement mortar 1:6 in less than 9" (229 mm) thick coping of required shape in straight or curved walls including cutting tiles to required shape making drip, raking, out joints and curing etc. complete in ground floor super structure	100 Cft. Cu.m.	80,884.24 28,564.03
63	Providing and laying first class solid burnt brick masonry set in cement mortar 1:6 in 9 inches (229 mm) thick and above cornice moulding, barges, string course and drip course etc of required shape in straight for curved walls including cutting brick to required shape scaffolding, raking, out joints and curing etc. In ground floor superstructure	100 Cft. Cu.m.	46,284.10 16,345.09
64	Providing and laying first class burnt brick masonry set in cement mortar 1:6 in less than 9 inches (229 mm) thick cornice, moulding, barges, string course and drip course etc. of required shape in straight or curved walls including cutting brick to required shape, scaffolding, raking, out joints and curing etc. in ground floor superstructure	100 Cft. Cu.m.	47,214.10 16,673.52
65	Providing and laying first class burnt brick tile masonry set . in cement mortar 1:6 in 9 inches (229 mm) thick and above cornice moulding barges, string course, and drip course etc, of required shape straight or curved walls including cutting tiles to required shape, scaffolding, raking, out Joints and curing etc. complete in ground floor super-structure .	100 Cft. Cu.m.	78,620.78 27,764.69
66	Providing and laying first class burnt brick tile masonry set in cement mortar 1:6 in less than 9 inches (229 mm) thick cornice, moulding, barges, string course and drip course etc. of required shape in straight or curved walls including cutting bricks to required shape, scaffolding, raking, out Joints and curing etc. in ground floor superstructure	100 Cft. Cu.m.	80,144.53 28,302.80

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S. No.	Description	Unit	Rate in Rs.
67	Providing and laying second class burnt brick tiles masonry set in cement mortar 1:6 in 9 inches (229 mm) thick and above in cornice, moulding, barges, string course and drip course etc. of required shape in straight or curved walls including cutting tiles to required shape, scaffolding, raking, out joints and curing,, etc.. in ground floor super-structure	100 Cft. Cu.m.	71,519.53 25,256.91
68	Providing and laying second class burnt brick masonry set in cement mortar 1:6 in less than 9 inches (229 mm) thick cornice, moulding barges, string course and drip course etc. of required shape, in straight or curved walls inclouding cutting tiles to required shape, scaffolding, raking, out joints and curing etc. in ground floor superstructure.	100 Cft. Cu.m.	73,105.78 25,817.09
69	Deduct for second class brick masonry instead of first class brick masonry from item 1 to 6, 24 to 29, 33 to 37, 51,52,57 58, 63 and 64	100 Cft. Cu.m.	2,115.35 747.03
70	Extra for bricks or tile masonry in first floor over item Nos. 24 to 37 and 51 to 68.	100 Cft. Cu.m.	2,341.09 826.75
71	Extra for brick or tile masonry in every additional floor over first floor over item Nos. 24 to 37 and 51 to 68	100 Cft. Cu.m.	1,853.50 654.56
72	Extra for brick or tile arches in first floor on item Nos. 38 to 47	100 Cft. Cu.m.	2,824.99 997.64
73	Extra for brick or tile arches in every additional floor above first floor on item Nos. 38 to 47	100 Cft. Cu.m.	2,506.63 885.21
74	Extra for honey-comb masonry in first floor on Item Nos. 48 & 49	100 Cft. Cu.m.	1,857.18 655.86
75	Extra for honey-comb masonry in every additional floor above first floor on item Nos. 48 & 49	100 Cft. Cu.m.	1,853.50 654.56
76	Extra for solid burnt brick masonry of any description set in 1:5 cement mortar instead of 1:6 cement mortar over item Nos, 1 to 3, 10 to 15. 24 to 26, 38 to 43 and 51, 52, 57, 58, 63 and 64.	100 Cft. Cu.m.	563.45 198.98
77	Extra for solid burnt brick tile masonry of any description set in 1:5 cement mortar instead of 1:6 cement mortar over item. 16 to 19, 44 to 47, 53 to 56, 59 to 62, 65 to 68.	100 Cft. Cu.m.	929.70 328.32
78	Extra for honey-comb masonry set in 1:5 cement mortar instead of 1:6 cement mortar over item Nos. 48 to 49	100 Cft. Cu.m.	112.69 39.80
79	Extra for solid burnt brick masonry of any description set in 1:4 cement mortar instead of 1:6 cement mortar over item Nos. 1 to 3, 10 to 15, 24 to 26, 38 to 43, 51, 52, 57, 63 & 64.	100 Cft. Cu.m.	1,188.08 419.57

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S. No.	Description	Unit	Rate in Rs.
80	Extra for solid burnt brick tile masonry of any description set in 1:4 cement mortar instead of 1:6 cement mortar over item Nos. 16 to 19, 44 to 47, 53 to 56, 59 to 62 & 65 to 68..	100 Cft.	1,960.32
		Cu.m.	692.28
81	Extra for honey-comb masonry set in 1:4 cement mortar, instead of 1:6 cement mortar over item Nos. 48 & 49	100 Cft.	237.62
		Cu.m.	83.91
82	Extra for solid burnt brick masonry of any description set in 1:1:6 lime cement mortar instead of 1:6 cement mortar' over items 1 to 3, 10 to 15, 24 to 26, 38 to 43, 51, 52, 57, 63 & 64.	100 Cft.	1,105.06
		Cu.m.	390.25
83	Deduct for solid burnt brick tile masonry of any description set in 1:1:6 lime cement mortar instead of 1:6 cement mortar over items 16 to 19, 44 to 47, 53 to 56, 59 to 62, 65 to 68..	100 Cft.	1,823.36
		Cu.m.	643.91
84	Deduct for honey-comb masonry set in 1:1:6 lime cement mortar instead of 1:6 cement mortar over items 48 and 49 .	100 Cft.	221.01
		Cu.m.	78.05
85	Extra for solid burnt brick masonry of any description set in 1:1:5 lime cement mortar instead of 1:6 cement mortar over items 1 to 3, 10 to 15, 24 to 26, 38, 43, 51, 52, 58, 63 & 64.	100 Cft.	563.45
		Cu.m.	198.98
86	Extra for solid burnt brick tile masonry of any description set in 1:1:5 lime cement mortar instead of 1:6 cement mortar over item Nos 16 to 19, 44 to 47, 53 to 56. 59 to 62, 65 to 68	100 Cft.	929.70
		Cu.m.	328.32
87	Extra for honey-comb masonry set in 1:1:5 lime cement mortar instead of 1:6 cement mortar over items 48 & 49.	100 Cft.	112.69
		Cu.m.	39.80
88	.Extra for solid burnt brick masonry of any description set in 1:1:4 lime cement mortar instead of 1:6 cement mortar over items 1 to 3, 10 to 15, 24 to 26, 38 to 43, 51, 52, 57, 58, 63 and 64	100 Cft.	2,397.36
		Cu.m.	846.62
89	Extra for solid burnt brick tile masonry of any description set in 1:1:4 lime cement mortar instead of 1:6 cement mortar over item Nos. 16 to 19, 44 to 47, 53 to 56, 59 to 62, 65 to 68 .	100 Cft.	3,955.65
		Cu.m.	1,396.93
90	Extra for honey-comb masonry set in 1:1:4 lime cement mortar instead of 1:6 cement mortar over items 48 and 49.	100 Cft.	479.47
		Cu.m.	169.32
91	Deduct for solid burnt brick masonry of any description set in 1:8 cement mortar instead of 1:6 cement mortar from items 1 to 3, 10 to 15, 24 to 26, 38 to 43, 51, 52, 57, 58, 63 & 64 .	100 Cft.	658.87
		Cu.m.	232.68
92	Deduct for solid burnt brick tile masonry of any description set in 1:8 cement mortar instead of 1:6 cement mortar from item Nos. 16 to 19, 44 to 47, 53 to 56, 59 to 62, 65 to 68.	100 Cft.	1,087.14
		Cu.m.	383.92

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S. No.	Description	Unit	Rate in Rs.
93	Deduct for honey-comb masonry set in 1:8 cement mortar instead of 1:6 cement mortar from items 48 and 49	100 Cft.	131.77
		Cu.m.	46.54
94	Deduct for solid burnt brick masonry of any description set in 1:1:8 lime cement mortar instead of 1:6 cement mortar from items 1 to 3, 10 to 15, 24 to 26, 38 to 43, 51, 52, 57, 58, 63 and 64	100 Cft.	(266.13)
		Cu.m.	(93.98)
95	Deduct for solid brunf brick tile masonry of any description set in 1:1:8 lime cement mortar instead of 1:6 cement mortar from items 16 to 19, 44 to 47, 53 to 56, 59 to 62, 65 to 68.	100 Cft.	(439.12)
		Cu.m.	(155.07)
96	Deduct for honey-comb masonry set in 1:1:8 lime cement mortar instead of 1:6 cement mortar from item Nos 48 and 49	100 Cft.	(53.23)
		Cu.m.	(18.80)
	WELL MASONRY		
97	Providing and laying first class solid burnt brick masonry in cement mortar 1:3 wells (steining) more than 13-1/2 inches (343 mm) thick including scaffolding curing etc. complete depth upto 10 feet (3.05 m)	100 Cft.	49,719.46
		Cu.m.	17,558.28
98	Providing and laying first class solid burnt brick masonry in cement mortar 1:4 wells (steining) more than 13-1/2 inch (343 mm) thick including scaffolding curing etc. complete depth upto 10 feet (3.05 m)	100 Cft.	48,605.30
		Cu.m.	17,164.82
99	Providing and laying first class solid burnt brick masonry in cement mortar 1:3 wells (steining) 9 inches (229 mm) to 13-1/2 inch (343 mm) thick including scaffolding curing etc. complete depth upto 10 feet (3.05 m)	100 Cft.	52,313.21
		Cu.m.	18,474.25
100	Providing and laying first class solid burnt brick masonry in cement mortar 1:4 wells (steining) 9 inches (229 mm) to' 13-1/2 inch (343 mm) thick including scaffolding curing etc. complete depth upto 10 feet (3.05 m)	100 Cft.	51,199.05
		Cu.m.	18,080.79
101	Extra for every additional 5 feet (1.52 m) depth or part thereof for brick masonry in walls (seining).	100 Cft.	1,281.45
		Cu.m.	452.54
	BRICK WALLS WITH CAVITY (SUPERSTRUCTURE)		
102	Providing and laying first class solid burnt brick masonry set in cement mortar 1:6 with 2" to 3 cavity & 4-1/2 (114 mm) thick width on either side in straight or curved cavity walls bonded with wall ties of approved design at required horizontal and vertical spacing, raking out joints and curing etc. complete in ground floor superstructure but excluding the cost of wall ties	100 Cft.	35,446.79
		Cu.m.	12,517.93
103	Providing and laying first class solid burnt brick masonry set in cement mortar 1:6 with 2" to 3" (51 mm to 76 mm) cavity and 4-1/2 (114 mm) width on one side and 9 (229 mm) width on other side in straight or curved cavity walls bonded with wall ties of approved design at required horizontal and vertical spacing, including scaffolding,raking out joints and curing etc. complete in ground floor superstructure but excluding the cost of wall ties	100 Cft.	37,611.28
		Cu.m.	13,282.31

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S. No.	Description	Unit	Rate in Rs.
104	Providing and laying first class solid burnt brick masonry set in cement mortar 1:6 with 2" to 3" (51 mm to 76 mm) cavity and 9" (229 mm) width on either side in straight or curved cavity walls bonded with wall ties of approved design at required horizontal and vertical spacing, I/C scaffolding ,raking out joints and curing etc. complete in ground floor superstructure but excluding the cost of wall ties	100 Cft. Cu.m.	37,126.71 13,111.19
105	Providing and laying first class solid burnt brick masonry set in cement mortar 1:6 with 2" to 3" (51 mm to 76 mm) cavity and 4-1/2" (114 mm) width on one side and 13-1/2" (343 mm) width on other side in straight or curved cavity walls bonded with wall ties of approved design at required horizontal and vertical spacing, I/C scaffolding ,raking out joints and curing etc. complete in ground floor superstructure but excluding the cost of wall ties	100 Cft. Cu.m.	38,620.61 13,638.75
106	Extra for brick masonry in cavity walls in first floor over items 102 to 105	100 Cft. Cu.m.	2,872.50 1,014.41
107	Extra for brick masonry in cavity walls in every additional floor above first floor over items 102 to 105	100 Cft. Cu.m.	1,853.50 654.56
108	Extra for solid burnt brick masonry in cavity walls set in 1:4 cement mortar instead of 1:6 cement mortar over items 102 & 103	100 Cft. Cu.m.	944.52 333.55
109	Extra for solid burnt brick masonry in cavity walls set in 1:4 cement mortar instead of 1:6 cement mortar over items 104 & 105	100 Cft. Cu.m.	1,188.08 419.57
110	Deduct for solid burnt brick masonry in cavity walls set in 1:1:6 lime cement mortar instead of 1:6 cement mortar over items 102 & 103	100 Cft. Cu.m.	878.53 310.25
111	Deduct for solid first class burnt brick masonry in cavity wall set in 1:1:6 lime cement mortar instead of 1:6 cement mortar over items 104 & 105	100 Cft. Cu.m.	1,105.06 390.25
112	Extra for solid burnt brick masonry in cavity walls set in 1:1:5 lime cement mortar instead of 1:6 cement mortar over item No. 102 & 103	100 Cft. Cu.m.	447.95 158.19
113	Extra for solid burnt brick masonry in cavity walls set in 1:1:5 lime cement mortar instead of 1:6 cement mortar over item No. 104 and 105	100 Cft. Cu.m.	563.45 198.98
114	Extra for solid burnt brick masonry in cavity walls set in 1:1:4 lime cement mortar instead of 1:6 cement mortar over item No- 102 & 103	100 Cft. Cu.m.	447.95 158.19
115	Extra for burnt brick masonry in cavity walls set in 1:1:4 lime cement mortar instead of 1:6 cement mortar on item No. 104 & 105	100 Cft. Cu.m.	563.45 198.98
116	Deduct for solid burnt brick masonry in cavity walls set in 1:1:8 lime cement mortar instead of 1:6 cement mortar from item No. 102 and 103	100 Cft. Cu.m.	(878.53) (310.25)
117	Deduct for solid burnt brick masonry in cavity walls set in 1:1:8 lime cement mortar instead of 1:6 cement mortar from item No. 104 and 105	100 Cft. Cu.m.	(1,105.06) (390.25)

BRICK MASONRY
SUB-HEAD CODE 112

S. No.	Description	Unit	Rate in Rs.
	BRICK WORK IN QUETTA BOND		
118	Providing and laying reinforced first class solid brunt brick masonry Ouetta bond set in 1:3 cement mortar in straight or curved walls of any thickness including scaffolding, raking, out joints, curing etc. but excluding cost of reinforcement in foundation basement and plinth (foundation and basement masonry upto 5 feet or (1.52 m) depth and plinth upto 4 feet (102 m) height from ground level)	100 Cft.	42,299.86
		Cu.m.	14,938.07
119	Providing and laying reinforced first class solid burnt brick masonry in quetta bond set in 1:3 cement mortar in straight or curved walls including scaffolding, raking, out joints, curing etc. complete but excluding the cost of reinforcement in ground floor superstructure above 13-1/2" (343 mm) thick walls	100 Cft.	42,169.71
		Cu.m.	14,892.11
120	Providing and laying reinforced first class solid burnt brick masonry in Ouetta bond set in 1:3 cement mortar in straight or curved walls including scaffolding, raking out joints curing etc. complete but excluding cost of reinforcement in ground floor superstructure 9" to 13-1/2.(229 mm to 232 mm) thick walls	100 Cft.	47,419.18
		Cu.m.	16,745.94
121	Providing and laying reinforced first class solid burnt brick masonry in quetta bond set in 1:3 cement mortar in straight or curved walls including scaffolding, raking, out joints, curing etc. complete but excluding the cost of reinforcement in ground floor superstructure walls 4-1/2 (114 mm) or less in thickness	100 Cft.	50,933.90
		Cu.m.	17,987.15
122	Extra for every additional 5 feet (1.52 m) depth or part thereof in foundation and basement masonry for quetta bond over item 118	100 Cft.	1,473.66
		Cu.m.	520.42
123	Extra for every additional 4 feet (1.2 m) height or part thereof in plinth masonry for quetta bond over item 118,..	100 Cft.	1,128.16
		Cu.m.	398.41
124	Extra for solid burnt brick masonry in quetta bond .in first floor over item No. 119, 120 and 121	100 Cft.	2,906.97
		Cu.m.	1,026.59
125	Extra for solid burnt brick masonry in quetta bond in every additional floors above first floor over items 119, 120, 121	100 Cft.	1,875.74
		Cu.m.	662.41
126	Extra if lime cement mortar 1:1:3 instead of cement mortar 1:3 is used in brick masonry quetta bond over item Nos. 118. 119, 120 and 121	100 Cft.	1,629.05
		Cu.m.	575.29
127	Deduct if cement mortar 1:4 instead of cement mortar 1:3 is used in brick masonry in quetta bond from item 118 to 121	100 Cft.	966.17
		Cu.m.	341.20
128	Deduct if cement mortar 1:5 instead of cement mortar 1:3 is used in brick masonry in quetta bond from item 118 to 121	100 Cft.	1,507.83
		Cu.m.	532.48
129	Deduct if cement mortar 1:6 instead of cement mortar 1:3 is used in brick masonry in quetta bond from item 118 to 121	100 Cft.	1,996.44
		Cu.m.	705.04

BRICK MASONRY

SUB-HEAD CODE 112

S. No.	Description	Unit	Rate in Rs.
130	Deduct if lime cement mortar 1:1:4 (1 lime, 1 cement & 4 sand) instead of cement mortar 1:3 is used in brick masonry in quetta bond from item 118 to 121	100 Cft.	(82.49)
		Cu.m.	(29.13)
131	Deduct if lime cement mortar 1:1:5 (1 lime, 1 cement & 5 sand) instead of cement mortar 1:3 is used in brick masonry in quetta bond from item Nos. 118 to 121	100 Cft.	1,507.83
		Cu.m.	532.48
132	Deduct if lime cement mortar 1:1:6 (1 lime 1 cement & 6 sand) instead of cement mortar 1:3 is used in brick masonry in quetta bond from item Nos. 118 to 121 .	100 Cft.	1,038.16
		Cu.m.	366.62
133	Deduct if second class brick masonry is done instead of first class brick masonry in quetta bond from item 118 to 121	100 Cft.	360.10
		Cu.m.	127.17
	HOLLOW AND PERFORATED BRICK WORK IN SUPERSTRUCTURE		
134	Providing and laying first class hollow burnt brick masonry set in cement mortar 1:6 in walls more than 13-1/2" (343 mm) thick including scaffolding, raking, out joints and curing etc. complete in ground floor superstructure	100 Cft.	66,624.80
		Cu.m.	23,528.35
135	Providing and laying first class hollow burnt brick masonry set in cement mortar 1:6 in walls 9 to 13-1/2" (229 mm to 343 mm) thick including scaffolding, raking, out joints and curing etc. complete in ground floor superstructure	100 Cft.	68,349.16
		Cu.m.	24,137.30
136	Providing and laying first class hollow burnt brick masonry set in cement mortar 1:6 in walls 4-1/2" (114 mm) thick including scaffolding, raking, out joints and curing etc. complete in ground floor superstructure	100 Cft.	71,628.64
		Cu.m.	25,295.44
137	Providing and laying first class perforated brick masonry set in cement mortar 1:6 in walls more than 13-1/2" (343 mm) thick including scaffolding, raking, out Joints and curing etc. complete in ground floor superstructure	100 Cft.	65,839.68
		Cu.m.	23,251.09
138	Providing and laying first class perforated brick masonry set in cement mortar 1:6 in walls 9" to 13-1/2" (229 mm to 343 mm) thick including scaffolding, raking, out joints and curing etc. complete in ground floor superstructure	100 Cft.	68,433.43
		Cu.m.	24,167.06
139	Providing and laying first class perforated brick masonry set in cement mortar 1:6 in walls 4-1/2" (114 mm) thick including scaffolding, raking, out joints, curing etc. complete in ground floor superstructure	100 Cft.	70,009.68
		Cu.m.	24,723.71
140	Extra for hollow and perforated brick masonry in first floor on item Nos. 134 to 139	100 Cft.	2,906.97
		Cu.m.	1,026.59
141	Extra for hollow and perforated brick masonry in every additional floor above first floor on item Nos. 134 to 139	100 Cft.	1,875.74
		Cu.m.	662.41

BRICK MASONRY
SUB-HEAD CODE 112

S. No.	Description	Unit	Rate in Rs.
	REINFORCEMENT IN BRICK MASONRY OF ANY DESCRIPTION		
142	Providing and laying mild steel reinforcement bars in brick work of any description including straightening, removing twists, cutting, bending, binding, wastage, overlaps, placing holding in position, tying with binding wire, cost of wire etc. complete in basement, plinth and ground floor.	Cwt.	14,354.89
		Kg.	282.56
143	Providing and laying hoop iron reinforcement in brick work of any description including straightening, cutting, bending overlaps, wastage, and placing in position etc. complete in basement, plinth and ground floor	Cwt.	16,270.63
		Kg.	320.27
144	Providing and laying wall ties of mild steel flats of approved section and design placed at horizontal and vertical spacing in cavity wall of any description in any floor at any height..	lbs	192.36
		Kg.	424.07
145	Providing and laying mild steel reinforcement bars in steining of brick work in wells including straightening, removing twists, cutting, bending, binding, wastage, overlaps, placing in position, typing with binding wire, cost of wire etc. complete up to 5 feet (1.52 m) depth or part thereof.	Cwt.	14,585.07
		Kg.	287.09
146	Providing and laying hoop iron in steining of brick work in wells including strengthening, cutting, bending, wastage, overlaps, placing in position etc. complete upto 5 feet depth of part thereof	Cwt.	15,745.98
		Kg.	309.95
147	Extra for mild steel bars or hoop iron reinforcement in first floor over item Nos. 142 & 143	Cwt.	413.75
		Kg.	8.14
148	Extra for mild steel bars or hoop iron reinforcement in every additional floor above first floor over item 142 & 143	Cwt.	255.42
		Kg.	5.03
149	Extra for mild steel bars or hoop iron reinforcement in steining of brick work in wells for every additional 5 feet (1.52 m) depth or part thereof over item Nos 145 & 146 .	Cwt.	453.38
		Kg.	8.92
	FIRE BRICK MASONRY		
150	Providing and laying 4-1/2" (115 mm) thick fire-brick lining in walls for fire places laid in mortar of high alumina cement and fine aggregate of crushed fire bricks 1:2 including scaffolding etc. as per instructions of Engineer-in-Charge complete in basement plinth, ground floor superstructure	100 Cft.	88,007.72
		Cu.m.	31,079.66
151	Providing and laying 9" (229 mm) thick fire-brick lining in walls for fire places laid in mortar of high alumina cement and fine aggregate of crushed fire brick 1:2 including scaffolding etc. as per instructions of Engineer-in-Charge complete in basement, plinth and ground floor	100 Cft.	73,553.26
		Cu.m.	25,975.11

BRICK MASONRY
SUB-HEAD CODE 112

S. No.	Description	Unit	Rate in Rs.
152	Providing and laying fire-bricks lining 4-1/2" (115 mm) thick arches for fire place laid in mortar of high alumina cement and fine aggregate of crushed fire-bricks 1:2 including scaffolding, form work and its removal etc. as per instructions of the Engineer-in-Charge complete in basement, plinth and ground floor	100 Cft. Cu.m.	93,267.49 32,937.13
153	Providing and laying fire-brick lining 9 inches (229 mm) thick in arches laid in mortar of high alumina cement and the aggregate of crushed fire-bricks 1:2 including scaffolding, form work and its removal etc. as per instruction of Engineer-in-Charge in basement plinth and ground floor.	100 Cft. Cu.m.	86,099.74 30,405.87
154	Providing and laying 4-1/2" (144 mm) thick fire-bricks lining in walls for fire place laid in vitrified fire-clay mortar including scaffolding, as per instructions of Engineer-in-Charge complete in basement, plinth and ground floor.	100 Cft. Cu.m.	84,609.99 29,879.76
155	Providing and laying 9 inches (229 mm) thick fire-brick lining in walls for fire place laid in vitrified fire-clay mortar including scaffolding etc. as per instructions of Engineer-in-Charge complete in basement, plinth and ground floor.	100 Cft. Cu.m.	69,299.94 24,473.07
156	Providing and laying fire-bricks lining 4-1/2" (114 mm) thick in arches for fire ptace with vitrified fire-clay mortar, including scaffolding, form work and its removal etc. as per instructions of Engineer-in-Charge complete in basement plinth and ground floor.	100 Cft. Cu.m.	88,493.76 31,251.31
157	Providing and laying fire-bricks lining 9" (229 mm) thick in arches for fire-place with vitrified fire clay mortar including scaffolding from work and its removal etc. as per instructions of Engineer-in-Charge complete in basement, plinth and ground floor...	100 Cft. Cu.m.	82,030.88 28,968.96
158	Extra for first floor	100 Cft. Cu.m.	2,906.97 1,026.59
159	Extra for every additional floor above first floor.	100 Cft. Cu.m.	1,875.74 662.41
	GLASS BLOCK WORK		
160	Providing and laying 3-7/8" (98 mm) thick pressed hollow translucent glass blocks in walls panels partition, glazing etc- laid in hydrated lime cement mortar 1:1:4 (1 hydrated lime putty, 1 cement 4 sand) with recesses or rebate, where required including precoating of asphalt emulsion or equivalent approved compound over sills, filling recesses with non-hardening compound mastic or glass fiber, finishing neatly, washing pointing 1/C scaffolding etc. as per direction of the Engineer-in-Charge in ground floor (reinforcement to be paid separately if provided)	100 Cft. Cu.m.	296,193.17 31,881.94

BRICK MASONRY
SUB-HEAD CODE 112

S. No.	Description	Unit	Rate in Rs.
161	Providing and laying 3-7/8" (98 mm) thick pressed hollow transparent glass blocks in walls, panels, partition, glazing etc. laid in hydrated lime cement mortar 1:1:4 (1 hydrated lime putty 1 cement 4 sand) with recesses or rebates where required including precoating of asphaltic emulsion or equivalent approved compound over sills, filling recesses with non-hardening compound mastic or glass fiber finishing neatly washing pointing I/C scaffolding etc. as per direction of Engineer-in-Charge in ground floor (Reinforce-ment to be paid separately) if provided	100 Cft.	260,646.29
		Cu.m.	28,055.71
162	Providing and laying 3-7/8" (98 mm) thick pressed hollow transparent glass blocks in roof sky light etc- laid in hydrated lime cement mortar 1:1:4 (1 hydrated lime putty: 1 cement: 4 sand) including cost of granulated-cork-insulation painted with approved paint, finishing neatly, washing form work and its removal and pointing I/C scaffolding, etc. complete as per direction of the Engineer-in-Charge in ground floor (reinforcement to be paid separately) if provided	100 Cft.	367,674.92
		Cu.m.	39,576.16
163	Providing and laying 3-7/8" (98 mm) thick pressed hollow translucent glass blocks in roof, sky light etc. laid in hydrated lime cement mortar 1:1:4 (1 hydrated 1 cement 4 sand) including cost of granulated cork, insulation painted with approved paint, finishing neatly, washing, form work and its removal, and pointing I/C scaffolding etc. complete as per direction of Engineer-in-Charge in ground floor (reinforcement to be paid separately if provided)	100 Cft.	331,766.67
		Cu.m.	35,711.03
164	Extra for first floor	100 Cft.	1,360.54
		Cu.m.	146.45
165	Extra for every additional floor above first floor	100 Cft.	1,197.39
		Cu.m.	128.89
	REINFORCEMENT IN GLASS BLOCK MASONRY		
166	Providing and laying mild steel reinforcement bars in glass block work for panels, partitions, glazing etc. including straightening, removing twist, cutting, bending, binding, wastage, overlaps, placing in position tying with binding wire etc. complete cost of wire etc. in ground floor..	Cwt.	15,452.32
		Kg.	304.17
167	Providing and laying expanded metal strips reinforcement of required mesh in glass block panels, partitions etc. including straightening, cutting, bending, wastage, over-laps placing in position etc. complete in ground floor.	Cwt.	18,688.52
		Kg.	367.87
168	Providing and laying hoop iron reinforcement in glass block panels, partitions, glazing etc. including cutting, straightening, bending, overlaps, wastage placing in position etc complete in ground floor.	Cwt.	16,053.50
		Kg.	316.00
169	Extra for reinforcement in glass block work in first floor	Cwt.	620.63
		Kg.	12.22
170	Extra for reinforcement in glass block work in every additional floor above first floor	Cwt.	383.13
		Kg.	7.54

BRICK MASONRY
SUB-HEAD CODE 112

S. No.	Description	Unit	Rate in Rs.
	REINFORCEMENT BRICK WORK IN LINTELS. CHAJJA. SLABS AND STAIRS. ETC.		
171	Providing and laying reinforced first class solid burnt brick set in cement mortar 1:3 in lintels including scaffolding, form work and its removal curing etc. but execluding the cost of reinforcement in basement, plinth and ground floor	100 Cft.	59,433.98
		Cu.m.	20,988.93
172	Providing and laying reinforced first class solid burnt brick in cement mortar 1:3 in 4-1/2" (114 mm) thick ribbed slab (Overall) with cement concrete in ribs and top using screened graded bajri 3/4" (19 mm) and down gauge (having minimum works cube crushing strength of 2250 Lbs. per square inch (15.52 N/mm2) at 28 days of Mix not leaner than 1:2:4) including form work and its removal compacting, curing etc. complete but excluding cost of reinforcement in basement, mezzanine and ground floor.	100 Cft.	63,053.08
		Cu.m.	22,267.01
173	Providing and laying reinforced first class solid burnt brick set in cement mortar 1:3 in 6" (152 mm) thick ribbed slab (overall) with cement concrete in ribs and top using screened graded bajri 3/4 (19 mm) and down gauge (having minimum work cube crushing strength of 2250 Lbs. per square inch (15.52 N/mm2) at 28 days of mix not leaner than 1:2:4) including form work and its removal compacting, curing etc. complete but excluding the cost of reinforcement in basement, mezzanine and ground floor	100 Cft.	59,625.80
		Cu.m.	21,056.67
174	Providing and laying reinforced first class solid burnt brick set in cement mortar 1:3 in 7-1/2" (190 mm) thick ribbed slab (overall) with cement concrete in ribs and top using screened graded bajri 3/4 (19 mm)and down gauge (having minimum work cube crushing strength of 2250 Lbs-per square inch (15.52 N/mm2) at 28 days of mix not leaner than 1:2:4) including form work its removal, compacting, curing etc. complete but excluding cost of reinforcement in basement, mezzanine and ground floor)	100 Cft.	49,445.43
		Cu.m.	17,461.51
175	Providing and laying reinforced first class solid burnt brick set in cement mortar 1:3 in 3" (76 mm) thick cantilevered slab, sun shade or chajja including form work and its removal, curing etc. complete but excluding cost of reinforcement in basement, mezzanine and ground floor..	100 Cft.	86,982.22
		Cu.m.	30,717.51
176	Providing and laying reinforced first class solid burnt brick set in cement mortar 1:3 in 4-1/2" (114 mm) thick cantilevered slab sun shade or chajja including form work and its removal, curing etc- complete but excluding cost of reinforcement in basement, mezzanine and ground floor.	100 Cft.	78,451.69
		Cu.m.	27,704,98
	STAIR		
177	Providing and laying reinforced first class solid burnt brick set in cement mortar 1:3 in stair-case waist-slab, landing etc. of required section including scaffolding, form work and its removal, curing etc. complete but excluding cost of reinforcement in basement, mezzanine and ground floor-	100 Cft.	76,934.65
		Cu.m.	27,169.24

BRICK MASONRY
SUB-HEAD CODE 112

S. No.	Description	Unit	Rate in Rs.
178	Extra for first floor in item No. 171 to 177	100 Cft.	2,237.79
		Cu.m.	790.27
179	Extra for every additional floor in item Nos. 171 to 177 ...	100 Cft.	1,797.75
		Cu.m.	634.87
180	Extra over item No. 171 for providing and using sulphate resisting cement in place of ordinary portland cement	100 Cft.	1,798.21
		Cu.m.	635.03
181	Extra over item No. 172 for providing and using sulphate resisting cement in place of ordinary portland cement....	100 Cft.	2,875.00
		Cu.m.	1,015.30
182	Extra over item No. 173 for providing and using sulphate resisting cement in place of ordinary portland cement......	100 Cft.	3,245.96
		Cu.m.	1,146.30
183	Extra over item No. 174 for providing and using sulphate resisting cement in place of ordinary portland cement	100 Cft.	2,728.59
		Cu.m.	963.59
184	Extra over item No. 175 for providing and using sulphate resisting cement in place of ordinary portland cement....	100 Cft.	1,755.43
		Cu.m.	619.93
185	Extra over item No. 176 for providing and using sulphate resisting cement in place of ordinary portland cement	100 Cft.	1,725.83
		Cu.m.	609.47
186	Extra over item No. 177 for providing and using sulphate resisting cement in place of ordinary portland cement....	100 Cft.	1,743.12
		Cu.m.	615.58

STONE MASONRY

Code 113

STONE MASONRY (SH-113)
Brief *Specifications*

1. Stone:-

a) Stone shall be of best quality processed from an approved quarry.

b) Hard, sound, free from veins flaws, defects and cleavage.

c) Stone shall be of suitable sizes and in one piece.

d) Stone shall be hard, durable and tough e.g. sandstone, lime stone, granite, trap, quartzite etc according to locality.

e) The stones having a base of clay e.g. laterite, slate etc. shall be classified as of second class quantity.

f) The resistance to crusting of stone ranges from 150 to 1000 tons per square foot but in ordinary building work it is immaterial as the pressure seldom exceeds 10 tons per square foot.

g) Pitching, and dumping stone shall weigh between 50 Lbs (23 kg) to 80 Lbs (36 kg) a piece and shall have at least one side cut.

h) Stones used in pavement and ornamental work shall be hard, heavy, durable and fine-grained, capable of retaining fine polish.

i) Dumb-bell shaped bond stone shall not be allowed to be used in stone masonry.

2. Stone Masonry:-

i) All stones to be soaked in water for two hours, before being laid in cement mortar. All joints are to be well flushed up at every course. The wall shall be carried up regularly not leaving any part more than 1 meter (3.280 feet) lower than another unless special circumstances render then impracticable. Any wall left at different levels to be racked back.

ii) All masonry built with cement mortar shall be kept especially well watered. The top of the unfinished masonry shall be kept flooded at frequent intervals.

iii) All junctions of the walls shall be formed at the time the wall being built and cross walls shall be carefully bonded into the main walls.

iv) Courses to be properly leveled the jambs or doors and window opening shall be formed with quoins of the full height of the course.

v) The quoins shall be in breadth at least 1.5 times the depth of the course and in length at least twice the depth.

vi) For door openings 3 and for window openings 2 of these quoins shall be stones of the full thickness of the walls.

vii) All lintels and other stones which are not to be plastered over shall be of the full width of the walls including the thickness of the plastered face or faces.

viii) Stone masonry walls required to be plastered shall be racked not less than 3/8 inches / 10mm deep, when the mortar is green, but not later than 24 hours after the work is done.

ix) Joints of stone work which are to be struck will be cleaned and the same mortar pressed while the stone work proceeds using additional mortar if required. Racking of joints will not be done.

x) When pointing is to be done in stone work, it will be a separate process including racking out joints and using different mortar from that of stone work, mortar. Pointing will not be done in the same mortar.

xi) The pointing or striking out joints, will normally be adopted as follows:-

a. Flush pointing will only be used on inside surfaces.

b. Weather struck joints / pointing will generally be adopted for external work where the walls are not plastered.

c. Tuck pointing will be done on surfaces specially ordered by the Engineer in Charge.

d. All new work in cement will be kept watered and damp for such period as directed not exceeding 14-days and where it is to be built on old work the later will be kept watered for 2-days before hand.

3. Ashlar Masonry:-

i) The faces of the Ashlar Masonry will be fine tooled on all bed joints and facing.

ii) Joints and beds will be carefully dressed.

iii) The thickness of joints will be 1 /8 inches in case of fine Aslar and ¼ inches in case of other qualities of Ashlar.

iv) The stones will be laid in regular courses and all courses will be of the same height unless otherwise specified.

v) The course line shall be horizontal and side joints vertical throughout.

vi) All masonry shall be washed down on completion and all stains and splashes etc. should be removed from the face.

4. Coursed Rubble Masonry:-

i) The stones shall be laid in horizontal courses not less than 6 inches (150mm).

ii) The stone in each course shall be of equal height and all courses shall be of the same height unless otherwise specified.

iii) The face stones will be squared on all joints and beds.

iv) No pinning will be allowed on the face.

v) All side joints shall be vertical and beds horizontal and no joints shall be more than 3/8 inche (10 mm) in thickness.

vi) Stones shall break joints at least half the height of the course.

vii) The quoins shall be of the same height as the course in which they occur and shall be formed of stones at least 1.5 feet (0.457m) long laid as stretcher and header alternately.

viii) The work in the inferior face shall be precisely the same as on the exterior face.

Note: For more details, specifications for building and road works Pak. P.W.D. may be consulted.

5. Ramdon Rubble Masonry;-

i) The faces stones shall be laid absolutely without pinnings on the face.
ii) Each stone shall be carefully fitted so as to form neat and close joints.
iii) The joints will not exceed 1/4 inch (7 m.m) in thickness.
iv) The stones shall be roughly chisel dressed and those with uniform colour and approximately of equal sizes to be selected for face work.
v) The stones shall be arranged to break joints as much as possible and long vertical lines of joining shall be avoided in the face work.
vi) Through stone shall be inserted in at least every square yard of the face and shall run right through the wall if it is not more than two feet (600 mm). If it is more than 2 feet (600 mm) thick, a line of headers shall be laid from face to back, which hall be over lap each other at least 6 inches (150 m.m) the through stone shall be staggered.
vii) The quoins shall be of the same height as the course in which they occur and it shall be formed of stones at least 1-5 feet (0.457 m). long laid stretcher and header alternately.

6. Dry Stone Masonry;-

The specifications will be similar in all respect to that of Coursed Rubble, 3rd short, but no mortar will be used. The work will be brought up in batter of not less than 1 in 12. Refer Pak. PWD specification and road works.

7. Dry Stone Un-coursed Pitching, Revetment;-

i) The stones will be perfectly sound and as regular in shape as possible.

ii) The length of the stones will be about equal to the thickness of the required pitching or revetment without backing.

iii) The stones will be laid closely in position and firmly bedded, the length being made perpendicular to the face of the pitching or revetment.

iv) The sides of the bank will be trimmed to the required slope and profiles will be put up at required intervals to ensure regular work and uniform slope throughout.

v) The toe will be thoroughly secured against slipping by a properly constructed masonry wall in cement mortar.

8. Dry Coursed Rubble Masonry In Retaining Walls:-

i) The stones will be roughly hammer dressed so as to secure as large a bedding surface as possible. When laid all hollows round them will be tightly packed with smaller stones.

ii) The beds of the stones will be laid at right angles to the face batter.

iii) The front and rear faces of the walls will be built precisely similar in all respects and will be equally well bonded with the hearting.

iv) Through stones at least three feet in length will be provided in each course at 6 feet (1.82 m). apart on the face of the work and continued through the whole width with through stones overlapping 9 inches (225 m.m). so as to tie the front and rear face of the work together.

v) The filling immediately behind the wall will consist of stone refuse and chips. Earth will not be used for this purpose.

PAKISTAN PUBLIC WORKS DEPARTMENT

STONE MASONRY

SUB-HEAD CODE 113

S. No.	Description	Unit	Rate in Rs.
	FOUNDATION. PLINTH. RETRAINING WALLS. PITCHING AND STEPS		
1	Providing and laying uncoursed rubble masonry in cement mortar 1:6 in foundation, plinth and basement including scaffolding, curing etc. complete .	100 Cft.	26,339.03
		Cu.m.	9,301.55
2	Providing and laying uncoursed rubble masonry in mud mortar in foundation, and plinth including scaffolding, etc. complete .	100 Cft.	17,745.99
		Cu.m.	6,266.94
3	Providing and laying coursed rubble masonry first sort in cement mortar 1:6 in foundation, plinth and basement including scaffolding, curing etc. complete .	100 Cft.	40,730.68
		Cu.m.	14,383.92
4	Providing and laying coursed rubble masonry second sort in cement mortar 1:6 in foundation, plinth and basement including scaffolding, curing etc. complete .	100 Cft.	35,021.30
		Cu.m.	12,367.67
5	Providing and laying coursed rubble masonry third sort in cement mortar 1:6 in foundation, plinth and basement including scaffolding, curing etc. complete .	100 Cft.	28,266.73
		Cu.m.	9,982.31
6	Providing and laying dry uncoursed rubble masonry in retaining or compound wall etc. including scaffolding etc. complete .	100 Cft.	17,763.75
		Cu.m.	6,273.22
7	Providing and laying dry coursed rubble masonry in Retaining or compound wall etc. including scaffolding, etc. complete	100 Cft.	19,790.63
		Cu.m.	6,989.00
8	Providing and laying dry uncoursed rubble pitching 6" to 12" (152 mm to 305 mm) thick complete	100 Cft.	15,906.25
		Cu.m.	5,617.24
9	Providing and laying stone masonry random rubble first sort in cement mortar 1:6 in foundation, plinth and basement including scaffolding, curing etc. complete .	100 Cft.	38,871.30
		Cu.m.	13,727.28
10	Providing and laying stone masonry random rubble second sort in cement mortar 1:6 in foundation, plinth and basement including scaffolding, curing etc. complete	100 Cft.	33,059.23
		Cu.m.	11,674.77
11	Providing and laying "Ashlar-Fine" masonry in cement mortar 1:6 in foundation, plinth and basement including scaffolding, curing etc, complete.	100 Cft.	105,270.51
		Cu.m.	37,175.97
12	Providing and laying "Ashlar-Rough Tooled" or block in course masonry in cement mortar 1:6 in foundation, plinth and basement including scaffolding, curing etc. complete .	100 Cft.	72,009.01
		Cu.m.	25,429.77

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S. No.	Description	Unit	Rate in Rs.
13	Providing and laying "Ashlar Rock Rustic or Quarry Faced" masonry in cement mortar 1:6 in foundation, plinth and basement including scaffolding, curing etc. complete	100 Cft. Cu.m.	65,645.89 23,182.65
14	Providing and laying "Ashlar Chamfered" masonry in cement mortar 1:6 in foundation, plinth and basement including scaffolding, curing etc. complete	100 Cft. Cu.m.	83,224.64 29,390.53
15	Providing and laying "Ashlar Fine" stone work in plain or chequred tread or risers of steps in cement mortar 1:6 in foundation, plinth, basement and ground floor including scaffolding, curing etc. complete	100 Cft. Cu.m.	107,778.68 38,061.72
	SUPERSTRUCTURE		
16	Providing and laying uncoursed rubble masonry in cement mortar 1:6 in superstructure including scaffolding, curing etc. complete in ground floor.	100 Cft. Cu.m.	27,054.66 9,554.27
17	Providing and laying uncoursed rubble masonry in mud mortar in superstructure including scaffolding etc. complete in ground floor..	100 Cft. Cu.m.	19,994.74 7,061.08
18	Providing and laying coursed rubble masonry first sort in cement mortar 1 ;6 in superstructure including scaffolding, curing etc. complete in ground floor.	100 Cft. Cu.m.	42,977.55 15,177.39
19	Providing and laying coursed rubble masonry second sort in cement mortar 1:6 in superstructure including scaffolding, curing etc. complete in ground floor.	100 Cft. Cu.m.	39,818.18 14,061.67
20	Providing and laying coursed rubble masonry third sort in cement mortar 1:6 in superstructure including scaffolding, curing etc. complete in ground floor.	100 Cft. Cu.m.	31,719.86 11,201.77
21	Providing and laying stone masonry random rubble first sort in cement mortar 1:6 in superstructure including scaffolding curing etc. complete in ground floor...........	100 Cft. Cu.m.	42,699.43 15,079.18
22	Providing and laying stone masonry random rubble second sort in cement mortar 1:6 in superstructure including scaffolding, curing, etc. complete in ground floor..	100 Cft. Cu.m.	36,937.36 13,044.32
23	Providing and laying "Ashlar Fine" masonry in cement mortar 1:6 in superstructure including scaffolding curing etc. complete in ground floor.	100 Cft. Cu.m.	110,448.64 39,004.61
24	Providing and laying "Ashlar Rough Tooled" or "Bastard Ashlar" Block in course stone masonry in cement mortar 1:6 in superstructure including scaffolding, curing etc. complete in ground floor.	100 Cft. Cu.m.	67,746.51 23,924.48

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S. No.	Description	Unit	Rate in Rs.
25	Providing and laying "Ashlar Rock Rustic or Quarry Faced" masonry in cement mortar 1:6 in superstructure including scaffolding, curing etc. complete in ground floor.	100 Cft. Cu.m.	73,951.56 26,115.77
26	Providing and laying "Ashlar Fine Chamfered" masonry in cement mortar 1:6 in superstructure including scaffolding curing etc. complete in ground floor.	100 Cft. Cu.m.	91,527.76 32,322.75
27	Providing and laying "Ashlar Fine" stone masonry In sunk or moulded work upto a sectional area of 50 square inches (323 cm2) in cornice or coping, architraves, etc. in cement mortar 1:6 in superstructure including scaffolding, curing etc. complete in ground floor .	100 Rft. Ru.m	43,536.85 1,428.37
28	Providing and laying ashlar fine stone masonry in sunk or moulded work 50 to 100 sq. inches (323 cm2 to 645 cm2) sectional area in cornice, coping, architraves etc. in cement mortar 1:6 in superstructure including scaffolding curing etc. complete in ground floor .	100 Rft. Ru.m	86,717.80 2,845.07
29	Providing and laying ashlar fine stone masonry punched work (ordinary) in cement mortar 1:6 in superstructure including scaffolding, curing etc. complete in ground floor (gross measurement be accounted) .	100 Cft. Cu.m.	128,089.26 45,234.34
30	Extra for first floor on items 16 to 22	100 Cft. Cu.m.	4,221.94 1,490.96
31	Extra for every additional floor above first floor on items 16 to 22	100 Cft. Cu.m.	3,020.19 1,066.57
32	Extra for first floor on items 23 to 26	100 Cft. Cu.m.	4,791.19 1,691.99
33	Extra for every additional floor above first floor on items 23 to 26	100 Cft. Cu.m.	4,488.98 1,585.27
34	Extra for first on item No. 27	100 Rft. Ru.m	1,465.95 48.10
35	Extra for every additional floor above first floor on item 27	100 Rft. Ru.m	1,153.54 37.85
36	Extra for first floor on item 28 .	100 Rft. Ru.m	3,415.06 112.04
37	Extra for every additional floor above first floor on item 28	100 Rft. Ru.m	2,658.34 87.22
38	Extra for punched work in first floor on item 29 (gross measurement be accounted) „	100 Cft. Cu.m.	4,664.69 1,647.32
39	Extra for punched work in every additional floor above first floor on item 29 (gross measurement be accounted)	100 Cft. Cu.m.	3,677.04 1,298.54
40	Extra for using 1:3 cement mortar instead of 1:6 cement mortar on item No. 1 and 16	100 Cft. Cu.m.	4,604.47 1,626.05
41	Extra for using 1:3 cement mortar instead of 1:6 cement mortar on items 3, 4, 9, 18, 19 and 21.	100 Cft. Cu.m.	3,453.35 1,219.54

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S. No.	Description	Unit	Rate in Rs.
59	Deduct for using 1:1:6 lime cement mortar instead of 1:6 cement mortar on items 11, 15 and 23	100 Cft. Cu.m.	552.53 195.13
60	Deduct for using 1:1:6 lime cement mortar instead of 1:6 cement mortar on items 12 to 14 and 24 to 26	100 Cft. Cu.m.	1,105.06 390.25
61	Deduct for using 1:1:6 lime cement mortar instead of 1:6 cement mortar on item 27	100 Rft. Ru.m	191.85 6.29
62	Deduct for using 1:1:6 time cement mortar instead of'1:6 cement mortar on item 28	100 Rft. Ru.m	383.70 12.59
63	Deduct for using 1:1:6 lime cement mortar instead of 1:6 cement mortar on item 29 (gross measurement be counted)..	100 Cft. Cu.m.	442.03 156.10
64	Deduct for using 1:2 lime cement mortar instead of 1:6 cement mortar from item 1 and 16	100 Cft. Cu.m.	(1,418.36) (500.89)
65	Deduct for using 1:2 lime cement mortar instead of 1:6 cement mortar from items 3, 4, 9, 18, 19 and 21	100 Cft. Cu.m.	(1,063.77) (375.67)
66	Deduct for using 1:2 lime cement mortar instead of 1:6 cement mortar from items 5, 10, 20 and 22	100 Cft. Cu.m.	(1,241.07) (438.28)
67	Deduct for using 1:2 lime cement mortar instead of 1:6 cement mortar from items 11, "15 and 23...	100 Cft. Cu.m.	(354.59) (125.22)
68	Deduct for using 1:2 lime cement mortar instead of 1:6 cement mortar from items 12 to 14 and 24 to 26	100 Cft. Cu.m.	(709.18) (250.45)
69	Deduct for using 1:2 lime cement mortar instead of 1:6 cement mortar from item 27	100 Rft. Ru.m.	(123.12) (4.04)
70	Deduct for using 1:2 lime cement mortar instead of 1:6 cement mortar from item 28	100 Rft. Ru.m.	(246.24) (8.08)
71	Deduct for using 1:2 lime cement mortar instead of 1:6 cement mortar from item 29 (gross measurement be accounted)	100 Cft. Cu.m.	(354.59) (125.22)

STONE MASONRY

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S. No.	Description	Unit	Rate in Rs.
42	Extra for using 1:3 cement mortar instead of 1:6 cement mortar on items 5, 10, 20 and 22	100 Cft. Cu.m.	4,028.91 1,422.80
43	Extra for using 1:3 cement mortar instead of 1:6 cement mortar on items 11,15 and 23	100 Cft. Cu.m.	1,151.12 406.51
44	Extra for using 1:3 cement mortar instead of 1:6 cement mortar on items 12 to 14 and 24 to 26	100 Cft. Cu.m.	2,302.24 813.03
45	Extra for using 1:3 cement mortar instead of 1:6 cement mortar on item 27	100 Rft. Ru.m	399.69 13.11
46	Extra for using 1:3 cement mortar instead of 1:6 cement mortar instead on item 28	100 Rft. Ru.m	799.39 26.23
47	Extra for using 1:3 cement mortar instead of 1:6 cement mortar on items 29 (gross measurement be accounted)...	100 Cft. Cu.m.	1,151.12 406.51
48	Extra for using 1:4 cement mortar instead of 1:6 cement mortar on items 1 and 16	100 Cft. Cu.m.	2,376.15 839.13
49	Extra for using 1:4 cement mortar instead of 1:6 cement mortar on items 3, 4, 9, 18, 20, and 21 .	100 Cft. Cu.m.	1,782.11 629.35
50	Extra for using 1:4 cement mortar instead of 1:6 cement mortar on items 5, 10, 20 and 22	100 Cft. Cu.m.	2,079.13 734.24
51	Extra for using 1:4 cement mortar instead of 1:6 cement mortar on items 11, 15 and 23	100 Cft. Cu.m.	594.04 209.78
52	Extra for using 1:4 cement mortar instead of 1:6 cement mortar on items 12 to 14 and 24 to 26	100 Cft. Cu.m.	1,188.08 419.57
53	Extra for using 1:4 cement mortar instead of 1:6 cement mortar on item 27	100 Rft. Ru.m	206.26 6.77
54	Extra for using 1:4 cement mortar instead of 1:6 cement mortar on item 28	100 Rft. Ru.m	412.53 13.53
55	Extra for using 1:4 cement mortar instead of 1:6 cement mortar on item 29 (gross measurement be accounted).	100 Cft. Cu.m.	594.04 209.78
56	Deduct for using 1:1:6 lime cement mortar instead of 1:6 cement mortar on items 1 and 16	100 Cft. Cu.m.	2,210.13 780.50
57	Deduct for using 1:1:6 lime cement mortar instead of 1:6 cement mortar on items 3, 4, 9, 18, 19 and 21	100 Cft. Cu.m.	1,657.60 585.38
58	Deduct for using 1:1:6 lime cement mortar instead of 1:6 cement mortar on items 5, 10, 20 and 22	100 Cft. Cu.m.	1,933.86 682.94

REINFORCED CEMENT CONCRETE WORK

Code 114

Plain and Reinforced Concrete (SH-114)

Brief Specifications.

1. SCOPE The work covered by this section of the specifications consist of furnishing all plant, labour, equipment, appliances and material and in performing all operations in connection with the supply and installation of plain and reinforced concrete work, complete in strict accordance with this section of the specifications of the Contract.

2. GENERAL

a. Full cooperation-operation shall be given to other trades to install embedded items.

b. Suitable templates or instructions, or both, will be provided for setting items not placed in the forms. Embedded items shall have been inspected, and tests for concrete and other materials or for mechanical operations shall have been completed and approved, before concrete is placed.

c. Throughout the concrete work the contractor shall employ full time on the works at least one suitably qualified and experienced Engineer whose sole duties shall be as follows:-

- Design of concrete mixes.
- Control of quality of concrete.
- Supervision of mixing, transporting, placing compacting.
- Finishing, curing and protecting concrete including thermal control of large pours.

3. RELATED SPECIFICATIONS. Latest editions of the following British Standards are relevant to these specifications, as required.

B.S. 12	Portland Cement, ordinary and Rapid Hardening.
B.S. 410	Test Sieves.
B.S. 693	General Requirements for Oxy-Acetylene Welding of Mild Steel.
B.S. 785	Hot Rolled Bars and Hard Wire for the Reinforcement of Concrete.
B.S. 812	Methods for the Sampling and Testing of Mineral Aggregates, Sand Fillers.
B.S. 882-1201	Concrete Aggregates from Natural Sources.
B.S. 1144	Cold Worked Steel bars for the Reinforcement of Concrete
B.S. 1221T	Steel Fabric for the Reinforcement of Concrete
B.S. 1478	Bending Dimensions and Scheduling of Bars for the Reinforcement of Concrete.
B.S. 1856	General Requirements for the Metal-Arc Welding of Mild Steel.
B.S. 1881	Methods of Testing Concrete.
B.S. 3148	Test for Water for making Concrete.
B.S. 4027	Sulphate-Resisting Portland Cement.
B.S. 4449	Hot Rolled Steel Bars for the Reinforcement of Concrete.
B.S. 4461	Cold Worked Steel Bars for the Reinforcement of Concrete

B.S. 4466	Bending Dimensions and Scheduling of Bars for the Reinforcement of Concrete.
B.S. 4482	Hard Drawn Mild Steel Wire for the Reinforcement of Concrete.
B.S. 4483	Steel Fabric for the Reinforcement of Concrete.
B.S. 5337	Structural use of Concrete for Retaining Aqueous Liquids.
C.P. 110	Structural use of Concrete
C.P. 114	Structural use of Reinforced Concrete in Buildings.
C.P. 116	Structural Use of Precast Concrete

In addition the latest edition of other Pakistan and British Standards, American Concrete Institute Standards, American Society for Testing and Materials Standards and other standards as may be specified for Materials and Construction are also relevant.

4. MATERIALS.

a. **Aggregates** (except for Lightweight Concrete):

i. The sources of supply of all fine and coarse aggregates shall be from approved soures.

ii. All fine and coarse aggregates shall be clean and free from clay, loam, silt, and other deleterious matter. Coarse and fine aggregates shall be delivered and stored separately at site. Aggregates shall not be stored on muddy ground or where they are likely to become dirty or contaminated.

iii. Fine aggregate shall be hard coarse sand, crushed stone or gravel screening and shall conform to requirements of P.S. 243 and /or B.S. 882. Only fine aggregate of grading zones 1 to 3 (B.S. 882) mainly passing a 3/16 inch B.S shall be used. aggregate of zones 4 may be used for special mixes.

iv. Coarse aggregate shall be gravel or broken stone of hard durable material free from laminated structure and conforming to P.S. 243 and/or B.S. 882 graded as follows for use in mass concrete as in foundations:

Total Passing.	Percent by Weight.
40 mm (1½") B.S. Sieve	100
20 mm (3/4") B.S. Sieve	95-100
10 mm (3/8") B.S. Sieve	25-55
5 mm (3/16") B.S. Sieve	0-10

Coarse aggregate for all cast-in-place concrete other than mass concrete for foundations shall be graded with the following limits:

Total Passing.	Percent by Weight.
75 mm (3") B.S. Sieve	100
40 mm (1½") B.S. Sieve	95-100
20 mm (3/4") B.S. Sieve	30-70
10 mm (3/8") B.S. Sieve	10-35
5 mm (3/16") B.S. Sieve	0-5

v. Wherever feasible the nominal maximum size of aggregate for cast-in-place reinforced concrete slabs and other thin members, shall also be 20 mm($^{3}/_{4}$"). If there are difficulties in placing such a concrete the maximum size may be restricted to 12 mm($^{1}/_{2}$") provided the requirements for strength are satisfied.

vi. The nominal maximum size of the aggregate for precast concrete shall not be large than one-fifth of the narrowest dimension between sides of forms, one-third of the depth of slabs, nor three-fourths of the minimum clear distance between reinforcing bars or between bars and forms, whichever is least. In precast columns the nominal maximum size of the aggregate shall be limited as above but shall not be larger than two-thirds of the minimum clear distance between bars.

b. Cement:

i. The cement shall be fresh and of approved origin and manufacture, it shall be one of the following as may be specified by the Engineer In-charge.

- Ordinary or Rapid Hardening Portland Cement complying with the requirements of P.S. 232 or B.S. 12
- Sulphate-Resisting Portland Cement complying with requirements of P.S. 612 or B.S. 4027.

ii. Unless otherwise specified, ordinary Portland Cement complying with the requirements of B.S. 12 shall be used.

iii. There shall be sufficient cement on site to ensure that each section of work is completed without interruption. If the cement is supplied by the Employer, the contractors should inform the Employer of his requirements much before its use in construction.

iv. Cement reclaimed from cleaning of bags or from leaky containers shall not be used.

v. The contractor shall provide and erect (at his cost) in a suitable place dry, well ventilated, weather-proof and waterproof shed of sufficient capacity to store the cement.

vi. The cement shall be used as soon as possible after delivery and cement which has become stale or unsuitable through absorption of moisture from the atmosphere or otherwise shall be rejected and removed immediately from the site at the contractor's expense. Any cement in containers damaged so as to allow the contents to spill or access of the atmosphere to the cement prior to opening at the time of concrete mixing shall be rejected and removed immediately from the site at the contractor's expense.

vii. No cement stored through a monsoon or for more than six months should be used in reinforced concrete unless the test specified in Pak PWD Specification book – 2004. have been applied and cement found up to the requisite standard.

viii. The mixing together of different types of cement will not be permitted.

c. Water:

Only clean water from the city supply, tube well installed at the site or from other sources shall be used for mixing the concrete, curing, and cleaning plant and tools..

Where water can be shown to contain any sugar or any excess or acid alkali or salt, the same shall not be used. Water shall be free from earth, vegetable, organic and inorganic impurities, particularly the sulphates and any other substances likely to cause efflorescence, or salts which interfere with setting of mortars and prove harmful to the work. Water shall be without any colour or brackish taste and should generally be fit for drinking. P.H. value of water shall range between 6 and 8.

5. QUALITY

The turbidity in water should not exceed 2000 P.P.M.

NOMINAL CONCRETE MIXES OF NORMAL WEIGHT CONCRETE.

a. **Proportions of Mix:**

i. *Cement and aggregates:* The fine aggregate and the coarse aggregate shall be measured separately.

ii. **Water /cement ratio:** the quantity of water used shall be just sufficient to produce a dense concrete of adequate strength and workability for its purpose. For all external work and foundations the water /cement ratio should not exceed 0.55.

iii. **Workability:** The workability shall be controlled by direct measurement of water content, allowance being made for any water in the fine and coarse aggregates. The concrete shall be just sufficiently workable for it to be placed and compacted without difficulty, by the means available.

The workability shall be determined by slump test. Unless otherwise permitted or specified, the concrete shall be proportioned and produced to have a slump of 100 mm(4") or less if consolidation is to be by vibration, and 125 mm(5") or less if consolidation is to be by methods other than vibration. A tolerance of up to 25 mm(1") above the indicated maximum shall be allowed for individual batches provided the average for all batches or the most recent 10 batches tested, whichever is fewer, does not exceed the maximum limit, concrete of lower than usual slump may be used provided it is properly placed and consolidated.

6. STRENGTH REQUIREMENTS FOR CONCRETE:

a. Portland cement concrete when aggregates comply with B.S. 882, concrete made with Portland cement shall comply with the strength requirements of Table 1, columns 4 & 5 (works Test).

Table 1

Proportions and strength requirements for Portland cement with aggregates complying with B.S. 882.

Class	Nominal mix.	Cubic ft of aggregate per 112 lb. (50 kg) of cement		Cube strength 28 days after mixing .(lbf/in^2)		Alternate cube strength at 7 days after mixing. (lbf/in^2)	
▨	▨	Fine	coarse	preliminary test.	works test	preliminary test.	works test
A	1:1:2	$1^{1}/_{4}$	$2^{1}/_{2}$	6,000	4,500	4,000	3,000

B	$1:1\frac{1}{2}:3$	$1\frac{7}{8}$	$3\frac{1}{4}$	5.000	3,750	3,350	2,500
C	1:2:4	$2\frac{1}{4}$	5	4,000	3,000	2,700	2.000
D	1:3:6	$3\frac{3}{4}$	$7\frac{1}{2}$	2,700	2,000	1,800	1.350
E	1:4:8	5	10	□	1,600	□	□

The strengths given in table 1 are based on the assumption that average temperature is 68 °F. Where accurate record of temperature are kept allowance may be made for change of temperature or the cubes may be tested at the equivalent maturity.

b. Minimum Cement content and Maximum Water/Cement ratio:

Table-2 gives the minimum cement content required and the maximum water/cement ratio allowed when using a particular size of aggregate in a reinforced Portland cement concrete, to provide acceptable durability under the appropriate conditions of exposure.

Table 2

Minimum cement content (bags of 50 kg per 100 cft of concrete) & Maximum water/ cement ratio. required in Reinforced Portland Cement concrete to ensure durability under specified

conditions of exposure

	Nominal maximum size of aggregate/cement bag (50 kg)				maximum free water/ cement ratio
	40mm ($1\frac{1}{2}$")	20mm ($\frac{3}{4}$")	15mm ($\frac{1}{2}$")	10mm ($\frac{3}{8}$)	
Mild: e.g. completely protected against weather, or aggressive conditions, except for a brief period of exposure to normal weather conditions during construction.	$12\frac{1}{2}$	$14\frac{1}{2}$	$15\frac{1}{2}$	$16\frac{1}{2}$	0.70
Moderate: e.g. sheltered from severe rain and against freezing whilst saturated with water. Buried concrete and concrete continuously under water. Class B of BS 5337	15	$16\frac{1}{2}$	$18\frac{1}{2}$	19	0.60
Severe: e.g. exposed to sea-water, moor land water, driving rain, alternate wetting and drying and to freezing whilst wet. Subject to heavy condensation or corrosive fumes. Class A of BS 5337.	$18\frac{1}{2}$	$20\frac{1}{2}$	22	$23\frac{1}{2}$	0.50

c. **Maximum Cement Content:**

Cement contents in excess of 31 bags of 50 kg per 100 cft of concrete should not be used except with the prior approval of the Engineer In-charge.

7. PLANT AND WORKMAN SHIP.

a. **Formwork:**

i. Forms shall be used, wherever necessary, to conform the concrete and shape it to the required dimensions. Forms shall have sufficient strength to with-stand the pressure resulting from placement and vibration of the concrete and shall have sufficient rigidity to maintain specified tolerances..

ii. Earth cuts shall not be used as forms for vertical surface of reinforced concrete work unless required or permitted.

iii. Mud centering shall not be permitted .

iv. Formwork shall be of wrought timber. steel. plywood, proprietary building boards which gives the required finish to the surface of concrete. Wooden formwork shall be free from loose knots and shall be well seasoned.

v. The formwork shall conform to the shape. line and dimension as shown on the plans, and be so constructed as to remain sufficiently rigid during the placing and compacting of the concrete, and shall be sufficiently tight to prevent loss of liquid from the concrete

vi Where span exceeds 20 feet and height 15 feet of a building M.S Plates form work and M.S Pipe folding must be used to take the weight and pressure of the fresh concrete. For this aspect extra rates for folding had been provided in the schedule of rates 2012.

The design and engineering of the formwork, as well as its construction, shall be the responsibility of the contractor. Where necessary to maintain the specified tolerances the formwork shall be cambered to compensate for anticipated deflections in the formwork due to the weight and pressure of the fresh concrete and due to construction loads. Design of formwork shall ,in general, conform to ACI 347-68.

In normal circumstances (General where temperatures are above 20°C (68°F)) and where ordinary cement is used forms may be struck after expiry of the following periods:

Concrete work	**Period**
Walls, columns and vertical sides of beams.	48 hours or as may be decided by the Engineer In-charge.
Slabs (shores or props left under)	6 days
Beams soffits (shores or props left under)	12 days
Removal of shores or props to slabs: 1. Spanning up to 14 ft. 2. Spanning above 14 ft.	 10 days. 16 days.

Removal of shores or props to beams:	
1. Spanning up to 20 ft	18 days.
2. Spanning above 20 ft.	25 days.

For rapid hardening cement $^3/_7$ of the above period will be sufficient in all cases except vertical sides of slabs beams and columns which should be retained for minimum 24 hours.

b. **Batching:**

i. All cement, including cement supplied in bulk, shall be batched by weight. A bag of cement may be taken as 50 kg .

ii. Aggregates shall be batched by weight, due allowance being made for water content. Aggregates may be batched by volume only for nominal mixes.

iv. Where volumetric batching of aggregate is adopted gauge boxes shall be provided for measuring the coarse and the fine aggregate. These shall be deep and narrow rather than shallow and wide and shall be fitted with suitable handles. Test for bulking of sand shall be made at the intervals and the necessary quantity of sand added.

v. Each batch shall be so charged into the mixer that some water will enter in advance of the cement and aggregates. Water shall continue to flow for a period which extend to the end of the first 25% of the specified mixing time. Controls shall be provided to prevent batched ingredients from entering the mixer before previous batched has been completely discharged.

c. **Mixing:**

i. The concrete shall be mixed in an approved batch mixer conforming to the requirements B.S. 1305..

ii. Mixing shall continue for the period recommended by the mixer manufacturer or until there is apparently a uniform distribution of the materials and the mass is uniform in colour, whichever period is longer.

iii. Concrete shall be mixed only in quantities for immediate use. Concrete which has set shall not be re tempered, but shall be discarded.

d. **Transport:**

i. The concrete shall be transported from the place of mixing to the place of final deposit as rapidly as practicable by means which will prevent segregation or loss of or addition to ingredients. All ships, vehicles, or containers used for transporting the concrete shall be thoroughly clean.

ii. Concrete shall be deposited continuously, or in layers of such thickness that no concrete will be deposited on concrete which has hardened sufficiently to cause the formation of seams or planes of weakness within the section.

iii. The concrete shall be placed as soon after it has been mixed as is practicable. Once the concrete has left the mixer no more water shall be added, although the concrete may be mixed or agitated to help maintain workability

iv. The concrete shall be deposited as nearly as possible in its final position to avoid re-handling.

e. Consolidation:

i. All concrete shall be consolidated by vibration, spading, roding or forking so that the concrete is thoroughly worked around the reinforcement, around embedded items, and into corners of forms, eliminating all air or stone packets which may cause honey-combing, pitting, or planes of weakness. Internal vibrators shall have a minimum frequency of 8000 vibrations per min. and sufficient amplitude to consolidate the concrete effectively, They shall be operated by competent workmen , use of vibrators to transport concrete with forms shall not be allowed. Vibrators shall be inserted and with-drawn at points approximately 450 mm(18") apart. At each insertion, the duration shall be sufficient to consolidate the concrete but not sufficient to cause segregation, generally from 5 to 15 seconds. A spare vibrator shall be kept on the job site during all concrete placing operations.

ii. Over-vibration or vibration of very wet mixes is harmful and should be avoided.

f. Curing and Protection:

i. Beginning immediately after placement, concrete shall be protected from premature drying, excessively hot or cold temperatures, and mechanical injury, and shall be maintained with minimal moisture loss at a relatively constant temperature for the period necessary for hydration of the cement and hardening of the concrete.

ii. For concrete surfaces not in contact with forms, one of the following, procedures shall be applied immediately after completion of placement and finishing:

- ▫ Ponding or continuous sprinkling.
- ▫ Application of absorptive mats or fabric kept continuously wet.
- ▫ Application of sand kept continuously wet..

iii. Curing in accordance with sub-clause g(i) and (ii) above shall be continued for at least 7 days in the case of all concrete except concrete with Rapid-hardening Portland Cement for which the period shall be at least 3 days.

Reinforcement

i. Reinforcement for concrete shall conform to the respective Pakistan, British, ASTM or other standards as specified.

ii. All plain reinforcing bars shall comply with the requirements of B.S. 4449 for plain mild steel bars and shall have a minimum yield strength (characteristic strength) of 250 N/mm^2 (36,000 lbf/inch^2).

iii. Unless otherwise specified, shall deformed reinforcing bars shall comply with the requirements of B.S. 4461 for deformed cold worked steel bars and shall have a minimum yield strength (characteristic strength) of 425 N/mm^2(60,000 lbf/inch^2).

iv. Reinforcement of all types is to be stored on site in an approved manner so as to avoid damage.

v. All metal for reinforcement shall be free from loose mill scale, loose rust, mud, oil, grease or other harmful matter immediately before the concrete is placed.

vi Reinforcement is to be accurately placed as shown in the drawings, and secured against displacement by using 16 SWG G.I. wire ties or suitable clips at intersections and supported from the formwork by using concrete, metal or plastic chairs and spacers or hangers of an approved pattern. where concrete blocks are used for ensuring the cover they shall be made of mortar not leaner than 1 part cement to 2 parts of sand..

vii. Bars used for concrete reinforcement shall be fabricated in accordance with the dimension shown in the schedule.

Viii The contractors shall be paid for reinforcement by weight computed from the following tables and from linear measurements of reinforcement actually used at site

standard weights of bars

Nominal Bar Dia. (inches)	Weight (lbs.)		Nominal Bar Dia. (mm)	Weight (Kg)
¼	0.167		6	0.222
3/8	0.376		8	0.395
½	0.668		10	0.616
5/8	1.034		12	0.888
¾	1.502		16	1.597
7/8	2.044		20	2.466
1	2.670		25	3.854
1-1/8	3.380		32	6.313
1-1/4	4.172		40	9.864
1-3/8"	5.049			
1-1/2	6.008			

ix. **Spacing limits for reinforcement:**

a. The minimum clear spacing between parallel bars in a layer shall be d_b but not less than 1 in.

b. Where parallel reinforcement is placed in two or more layers, bars in the upper layers shall be placed directly above bars in the bottom layer with clear distance between layers not less than 1 in.

c. In spirally reinforced or tied reinforced compression members, clear distance between longitudinal bars shall be not less than 1.5 d_b nor less than 1-1/2 in.

d. Clear distance limitation between bars shall apply also to the clear distance between a contact lap splice and adjacent splices or bars.

x. Bending:

All reinforcement shall bent cold, unless otherwise permitted by the Engineer.

Minimum Diameters of Bend:

Bars Size	Minimum diameter
No. 3 through No. 8	6 d_b

No. 9, No. 10, and No. 11	8 d_b
No. 14 and No. 18	10 d_b

xi. Pre-stressing steel:

Steel for pre-stressing shall conform to one of the following specifications:

a. Wire conforming to "Specification for Uncoated Stress-Relived Steel Wire for pre-stressed Concrete" (ASTM A 421).

b. Low-relaxation wire conforming to "Specification for coated Stress-Relieved Steel Wire for pre-stressed Concrete" including Supplement " Low-Relaxation Wire" (ASTM A 421);

PAKISTAN PUBLIC WORKS DEPARTMENT

REINFORCED CEMENT CONCRETE WORK

SUB-HEAD CODE 114

S. No.	Description	Unit	Rate in Rs.
	FOUNDATION		
1	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in column footing of required shape including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in foundation basement and plinth	100 Cft. Cu.m.	37,586.27 13,273.48
2	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in raft or strip foundation with columns and pillars, of any shape including form work and its removal, compacting, leveling and curing etc. complete but excluding the cost of reinforcement, in foundation basement and plinth	100 Cft. Cu.m.	32,691.15 11,544.78
	COLUMNS AND PILLARS		
3	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in columns of T,L, angular or cross shape of regular section including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in foundation basement and plinth	100 Cft. Cu.m.	43,242.46 15,270.95
4	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in columns of square or rectangular shape of regular section including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in foundation basement and plinth .	100 Cft. Cu.m.	41,408.12 14,623.15
5	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in columns of circular shape of uniform section including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in foundation basement and plinth	100 Cft. Cu.m.	48,289.70 17,053.36

REINFORCED CEMENT CONCRETE WORK

SUB-HEAD CODE 114

S. No.	Description	Unit	Rate in Rs.
6	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in columns of shape and section other than mentioned in item 3,4 and 5 including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in foundation basement and plinth	100 Cft. Cu.m.	44,192.28 15,606.37
7	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 tbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in columns of conical shape including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in foundation basement and plinth	100 Cft. Cu.m.	65,240.87 23,039.62
	PLINTH BEAMS		
8	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs.. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in plinth beams of required shape and design including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, tn foundation basement and plinth	100 Cft. Cu.m.	39,852.77 14,073.89
	WALLS AND CURBS		
9	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs.. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in straight walls more than 6 inches (152 mm) thick including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in foundation basement and plinth	100 Cft. Cu.m.	45,043.94 15,907.13
10	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in straight walls 5" (127 mm) to 6" (152 mm) thick including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in foundation basement and plinth	100 Cft. Cu.m.	54,586.44 19,277.04
11	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in straight walls 3 inch (102 mm) thick and lesthen 5 inch (127 mm) including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in foundation basement and plinth	100 Cft. Cu.m.	68,423.19 24,163.44

REINFORCED CEMENT CONCRETE WORK
SUB-HEAD CODE 114

S. No.	Description	Unit	Rate in Rs.
12	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in straight walls less then 3" (76 mm) thick including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in foundation basement and plinth	100 Cft.	74,104.17
		Cu.m.	26,169.67
13	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in curved walls more than 6" (152 mm) thick including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in foundation basement and plinth	100 Cft.	47,226.79
		Cu.m.	16,678.00
14	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in curved walls 5" (127 mm) to 6" (152 mm) thick including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in foundation basement and plinth	100 Cft.	56,503.28
		Cu.m.	19,953.97
15	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in curved walls 3" (76 mm) and less than 5" (127 mm) thick including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in foundation basement and plinth	100 Cft.	70,836.31
		Cu.m.	25,015.63
16	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs, per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in curved walls less than 3" (76 mm) thick including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in foundation basement and plinth	100 Cft.	76,010.39
		Cu.m.	26,842.84
17	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in straight retaining walls without counter forts up to 10 feet (3 M) height including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in ground floor	100 Cft.	42,087.69
		Cu.m.	14,863.14
18	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in straight retaining walls with counter forts up to 10 feet (3 M) height including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement,	100 Cft.	44,294.01

REINFORCED CEMENT CONCRETE WORK
SUB-HEAD CODE 114

S. No.	Description	Unit	Rate in Rs.
		Cu.m.	15,642.30
19	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in curved retaining walls with out counter forts up to 10 feet (3 M) height including form work and its removal compacting and curing etc. complete but excluding the cost of reinforcement,	100 Cft.	46,862.06
		Cu.m.	16,549.20
20	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in curved retaining walls with counter forts upto 10 feet (3 M) height including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement,	100 Cft.	50,065.11
		Cu.m.	17,680.34
21	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2 } at 28 days with a mix not leaner than 1:2:4 in curb of well or required shape and size including form work and its removal, compacting and curing etc, but excluding the cost of reinforcement, up to 30 feet (9 M) depth	100 Cft.	78,285.21
		Cu.m.	27,646.19
22	Extra for every additional 5 feet (1.52 m) depth or part thereof	100 Cft.	3,218.75
		Cu.m.	1,136.69
	COLUMN IN SUPERSTRUCTURE		
23	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in column of T.L, angular or cross shape of regular section including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in ground floor	100 Cft.	54,582.78
		Cu.m.	19,275.75
24	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in columns of square or rectangular shape of regular section including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in the ground floor	100 Cft.	52,186.17
		Cu.m.	18,429.39
25	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15-52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in circular pillars of regular including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in ground floor	100 Cft.	52,012.38
		Cu.m.	18,368.02

REINFORCED CEMENT CONCRETE WORK

SUB-HEAD CODE 114

S. No.	Description	Unit	Rate in Rs.
26	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in columns of shape and section other than mentioned in item Nos. 23,24 and 25 including form work and its removal, compacting and curing etc, but excluding the cost of reinforcement, in ground floor.	100 Cft. Cu.m.	47,682.69 16,839.00
27	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in columns of conical shape including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in ground floor.	100 Cft. Cu.m.	70,350.76 24,844.16
28	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 for encasing rolled steel section as columns including wire netting form work and its removal, compacting and curing etc. complete but excluding the-cost of rolled steel section in ground floor.	100 Cft. Cu.m.	54,192.00 19,137.74
29	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in drops of slab heads, caps and coping or bases of columns of pillars moulded to required details including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor..	100 Cft. Cu.m.	50,104.45 17,694.24
	WALLS AND FINS IN SUPERSTRUCTURE		
30	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in straight walls, vertical fins etc. more than 6 inches (152 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor.	100 Cft. Cu.m.	46,970.28 16,587.41
31	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in straight walls vertical fins etc. 5 inches (127 mm) to 6 inches (152 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor.	100 Cft. Cu.m.	54,623.11 19,289.99

REINFORCED CEMENT CONCRETE WORK

SUB-HEAD CODE 114

S. No.	Description	Unit	Rate in Rs.
32	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in straight walls vertical fins etc. 3 inches (70 mm) and less than 5 inches (127 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor..	100 Cft. Cu.m.	70,948.22 25,055.15
33	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in straight walls vertical fins etc. less then 3 inches (76 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor	100 Cft. Cu.m.	140,793.09 49,720.66
34	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in curved walls more than 6 inches (152 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor .	100 Cft. Cu.m.	47,747.97 16,862.05
35	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in curved walls 5 inches (127 mm) thick to 6" (152 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor .	100 Cft. Cu.m.	59,499.73 21,012.15
36	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in curved walls 3 inches (76 mm) and less than 5 inches (127 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor..	100 Cft. Cu.m.	72,308.19 25,535.42
37	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in curved walls less then 3 inches (76 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor.	100 Cft. Cu.m.	78,440.86 27,701.15

REINFORCED CEMENT CONCRETE WORK

SUB-HEAD CODE 114

S. No.	Description	Unit	Rate in Rs.
	BEAMS. LINTEL SILLS AND BED PLATES		
38	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in straight beams, lintels cantilever beams of required shape or section including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement and ground floor.	100 Cft. Cu.m.	46,810.39 16,530.95
39	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in curved beams, linteis and cantilever beams of required shape or section including form work and its removal, compacting and curing etc, complete but excluding the cost of reinforcement, in basement and ground floor.	100 Cft. Cu.m.	50,590.18 17,865.77
40	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15,52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in inclined beams, of varying section including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement and ground floor	100 Cft. Cu.m.	48,806.56 17,235.89
41	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in for encasing rolled steel section as beam including wire netting, form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement and ground floor.	100 Cft. Cu.m.	65,383.10 23,089.85
42	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in sill and bed plates of straight or circular walls including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement and goround floor.	100 Cft. Cu.m.	45,929.16 16,219.74

REINFORCED CEMENT CONCRETE WORK

SUB-HEAD CODE 114

S. No.	Description	Unit	Rate in Rs.
	BALUSTRADE. RAILING. PARAPET. HANGING. PARDI. EAVE BOARD ETC.		
43	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in straight balustrade of stair or balcony railing, sun breakers, parapet, hanging pardi, eave board etc. (all with apertures) 2 inches (50 mm) to 3" (76 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor..	100 Cft.	94,450.22
		Cu.m.	33,354.81
44	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 tbs. per sq inch (15.52 N/mm^2} at 28 days with a mix not leaner than 1:2:4 in curved balustrade of stair or balcony railing, sun breakers, parapet, hanging pardi, eave board etc. (all with apertures) 2 inches (51 mm) thick to 3" (76 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor	100 Cft.	94,621.66
		Cu.m.	33,415.36
45	Providing and laying reinforced cement concrete using screened graded.bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in straight balustrade of stair or balcony railing, sun breakers, parapet, hanging pardi, eave board etc. (all without apertures) 2 inches (50 mm) to 3" (76 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor.	100 Cft.	84,935.31
		Cu.m.	29,994.65
46	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15,52 N/mm^2) at 28 days with a mix not leaner than 1 ;2:4 in curved balustrade of stair or balcony railing, sun breakers, parapet, hanging pardi eave board etc. (all without apertures) 2 inches (50 mm) to 3" (76 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor.	100 Cft.	87,373.59
		Cu.m.	30,855.72
47	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in precast railing up to 2-1/2 inches (64 mm) thick in required shape including form work and its removal, compacting and curing fixing in position but excluding the cost of reinforcement,	100 Cft.	50,296.25
		Cu.m.	17,761.97

REINFORCED CEMENT CONCRETE WORK

SUB-HEAD CODE 114

S. No.	Description	Unit	Rate in Rs.
	ARCHES		
48	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in arches with solid spandrels of required section or shape including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor.	100 Cft. Cu.m.	57,902.50 20,448.09
49	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in arches with open spandrels of required section or shape including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor	100 Cft. Cu.m.	69,323.14 24,481.26
	STAIRS		
50	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in straight stairs and landing of required section including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor.	100 Cft. Cu.m.	57,317.53 20,241.51
51	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in winding stairs, landing of required section including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor.	100 Cft. Cu.m.	58,080.02 20,510.78
52	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in cantilevered steps including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor.	100 Cft. Cu.m.	66,196.97 23,377.26

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S. No.	Description	Unit	Rate in Rs.
53	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in precast spiral stairs case with railing 3 feet (0.9 m) dia with central post, nosing, rendering with cement slurry on all exposed surface including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor.	100 Cft. Cu.m.	90,197.63 31,853.02
54	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in precast spiral stairs case with railing 5 feet (1.52 m) dia to 6 feet (1.8 m) dia with central post, nosing, rendering with cement slurry on all exposed surface including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor.	100 Cft. Cu.m.	96,038.47 33,915.70
	SLABS HORIZONTAL. SUN SHADE OR CHAJJA		
55	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in ordinary slab 3 inches (76 mm) to less than 5" (127 mm) thick including form work and its removal compacting and curing etc, complete but excluding the cost of reinforcement, in basement plinth and ground floor.	100 Cft. Cu.m.	50,801.07 17,940.25
56	Providing and faying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in ordinary slab 5 inches (127 mm) to 6 inches (152 mm) thick Including form work and its removal compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor	100 Cft. Cu.m.	45,074.27 15,917.84
57	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in ordinary slab more than 6 inches (152 mm) thick including form work and its removal compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor..	100 Cft. Cu.m.	43,204.14 15,257.41

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S. No.	Description	Unit	Rate in Rs.
58	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in ordinary cantilevered slab 3 inches (76 mm) thick including form work and its removal compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor	100 Cft. Cu.m.	57,270.73 20,224.99
59	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in ordinary cantilevered slab, horizontal sun-shade or chajja tapered or straight average 3 inches (76 mm) to less then 5 inches (127 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor..	100 Cft. Cu.m.	52,144.25 18,414.58
60	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in ordinary cantilevered slab horizontal sun-shade or chajja tapered or straight average 5 inches (127 mm) to 6 inches (152 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor.	100 Cft. Cu.m.	49,943.93 17,637.55
61	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in ordinary cantilevered slab horizontal sun-shade or chajja tapered or straight average more than 6 inches (152 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor.	100 Cft. Cu.m.	52,005.65 18,365.64
62	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in flat circular slab 3 inches (76 mm) to less than 5 inches (127 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor .	100 Cft. Cu.m.	61,694.24 21,787.14

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S. No.	Description	Unit	Rate in Rs.
63	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in flat circular slab 5 inches (127 mm) to 6 inches (152 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor.	100 Cft. Cu.m.	51,928.24 18,338.30
64	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2} at 28 days with a mix not leaner than 1:2:4 in flat circular slab more than 6 inches (152 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor	100 Cft. Cu.m.	47,183.23 16,662.62
65	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in cantilevered flat slab, horizontal sun-shade or chajja tapered or straight (all of circular shape) average 3 inches (76 mm) and less then 5 inches (127 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor .	100 Cft. Cu.m.	75,036.97 26,499.08
66	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in cantilevered circular slab, horizontal sun-shade or chajja tapered or straight (all of circular shape) average 5 inches (127 mm) to 6 inches (152 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor.	100 Cft. Cu.m.	68,204.71 24,086.29
67	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in flat cantilevered circular slab, horizontal sun-shade or chajja tapered or straight (all of circular shape) average more than 6 inches (152 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor.	100 Cft. Cu.m.	71,971.94 25,416.68

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S. No.	Description	Unit	Rate in Rs.
68	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in folded plate or sloping slab 3 inches (76 mm) to less than 5 inches (127 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor	100 Cft. Cu.m.	66,548.43 23,501.38
69	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in folded plate or sloping slab 5 inches (127 mm) to 6 inches (152 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor	100 Cft. Cu.m.	54,292.33 19,173.17
70	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in folded plate or sloping slab more than 6 inches (152 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor.	100 Cft. Cu.m.	50,140.60 17,707.00
71	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in cantilevered sloping slab 3 inches (76 mm) to less than 5 inches (127 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor.....	100 Cft. Cu.m.	62,594.23 22,104.96
72	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in cantilevered sloping slab 5 inches (127 mm) to 6 inches (152 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor	100 Cft. Cu.m.	56,655.98 20,007.89
73	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in cantilevered sloping slab more than 6 inches (152 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor .	100 Cft. Cu.m.	53,826.18 19,008.55

S. No.	Description	Unit	Rate in Rs.
	SHELL ROOF. HOLLOW ROOF. PERGOLA DOMES. PORTALS AND TRUSSES		
74	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in simple barrel type shell roof up to 4 inches (100 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor.	100 Cft. Cu.m.	73,856.43 26,082.18
75	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in any type of shell roof other than simple barrel type shell roof up to 4 inches (100 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor .	100 Cft. Cu.m.	90,262.86 31,876.06
76	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in domes up to 4 inches (102 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor.	100 Cft. Cu.m.	99,646.16 35,189.74
77	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in hollow roof up to 9 inches to 12 inches (229 mm to 305 mm) thick (overall) including cost of 1:3:6 hollow cement concrete blocks form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor.	100 Cft. Cu.m.	33,197.40 11,723.56
78	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in hollow roof more than 9 inches up to 12 inches (229 mm up to 305 mm) thick (over all) including the cost of 1:3:6 hollow cement concrete blocks form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor..	100 Cft. Cu.m.	26,472.33 9,348.62

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S. No.	Description	Unit	Rate in Rs.
79	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in hollow roof above 12 inches (305 mm) thick (over all) including the cost of 1:3:6 hollow cement concrete blocks form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor.	100 Cft. Cu.m.	29,945.88 10,575.30
80	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in pergolas in required shape and design including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor.	100 Cft. Cu.m.	81,397.91 28,745.43
81	Providing and laying reinforced cement concrete using screened graded baJri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq, inch (15.52 N/mm^2} at 28 days with a mix not leaner than 1:2:4 in precast trusses and partal frames including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor	100 Cft. Cu.m.	179,679.98 63,453.44
	COPING CORNICE. SHELVE. HANGING PARDI. EAVE BOARD. HOOD DOOR. FRAME. JALI. FENCING POST		
82	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in coping and cornice of walls moulded to design including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor	100 Cft. Cu.m.	56,766.43 20,046.90
83	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in shelves 1-1/2 inches to 2 inches (38 to 51 mm) thick cast in situ including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor	100 Cft. Cu.m.	69,291.12 24,469.95
84	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in precast shelves 1-1/2 inches to 2 inches thick (38 to 51 mm) including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor.	100 Cft. Cu.m.	41,653.10 14,709.67

REINFORCED CEMENT CONCRETE WORK

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S. No.	Description	Unit	Rate in Rs.
85	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in straight hanging pardi, eave board up to 3 inches (76 mm) thick including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor	100 Cft. Cu.m.	94,398.10 33,336.41
86	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in circular type of hanging pardi, and eave board up to 3 inches (76 mm) thick including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor.	100 Cft. Cu.m.	107,541.49 37,977.96
87	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in hoods over chullah or oven in required shape and design or as directed by the Engineer-in-Charge including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor.	100 Cft. Cu.m.	60,609.22 21,403.96
88	Providing and fixing 1:2 precast reinforced or plain cement concrete jali or louvers upto 2 inches (51 mm) thick in required shape including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor (no deduction for holes shall be made)	100 Cft. Cu.m.	73,694.78 26,025.09
89	Providing and fixing 1:3 precast reinforced cement concrete jali or louvers upto 2 inches (51 mm) thick in required shape including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor (no deduction for holes shall be made)	100 Cft. Cu.m.	77,725.20 27,448.42
90	Providing and fixing 1:4 precast reinforced or plain cement concrete jali or louvers up to 2 inches (51 mm) thick in required shape including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor (no deduction for holes shall be made)	100 Cft. Cu.m.	74,906.38 26,452.96
91	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in fencing post braces and sign posts of required shape including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement	100 Cft. Cu.m.	52,949.86 18,699.08
92	Extra for lift for first floor on item Nos. 23 to 52 and 55 to 87.	100 Cft. Cu.m.	2,811.46 992.86

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S. No.	Description	Unit	Rate in Rs.
93	Extra for lift for every additional floor over first floor on item Nos. 23 to 52 and 55 to 87	100 Cft.	2,210.59
		Cu.m.	780.66
94	Extra for lift for first floor on item Nos. 88 to 90.	100 Cft.	1,965.81
		Cu.m.	694.22
95	Extra for every additional floor over first floor on item Nos. 88 to 90	100 Cft.	1,521.16
		Cu.m.	537.19
96	Extra for lift for first floor on item Nos. 53 and 54.	100 Cft.	1,394.03
		Cu.m.	492.30
97	Extra for every additional floor over first floor on item Nos. 53 and 54.	100 Cft.	1,065.13
		Cu.m.	376.15
	UNDER GROUND TANK SEPTIC TANK ETC		
98	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in foundation or bottom slab of circular underground tank including form works and its removal, leveling compacting and curing etc. complete but excluding the cost of reinforcement	100 Cft.	31,342.77
		Cu.m.	11,068.61
99	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in foundation or bottom slab of rectangular underground tank including form works and its removal, levelling, compacting and curing etc. complete but excluding the cost of reinforcement..	100 Cft.	30,918.91
		Cu.m.	10,918.92
100	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in walls of circular underground tank including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement .	100 Cft.	58,029.43
		Cu.m.	20,492.92
101	Providing and laying reinforced cement concrete using, screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in walls of rectangular underground water tank or septic tank including form works and its removal, compacting and curing etc. complete, but excluding the cost of reinforcement..	100 Cft.	54,020.53
		Cu.m.	19,077.19
102	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in baffle walls of rectangular septic tank ." including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement	100 Cft.	46,557.45
		Cu.m.	16,441.62

REINFORCED CEMENT CONCRETE WORK

SUB-HEAD CODE 114

S. No.	Description	Unit	Rate in Rs.
103	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in top slab of circular underground tank including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement .	100 Cft. Cu.m.	54,584.42 19,276.32
104	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in top slab of rectangular underground water tank or septic tank its removal, compacting and curing ate. complete but excluding the cost of reinforcement .	100 Cft. Cu.m.	46,239.73 16,329.42
105	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in dome type roof on top of circular underground tank including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement .	100 Cft. Cu.m.	81,147.71 28,657.07
106	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in shell type roof on top of rectangular underground tank including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement .	100 Cft. Cu.m.	90,100.21 31,818.62
	OVER HEAD WATER TANK. BIN BUNKER. INTZE TANK AND SILO		
107	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in slanting or vertical columns and braces of over head water tank, bins, bunkers, intze tank and silos up to a height of 30 feet (9 m) above ground including form works and its removal compacting and curing etc. complete but excluding the cost of reinforcement.	100 Cft. Cu.m.	68,763.37 24,283.58
108	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in ring beams of required section in circular over head water tank, bins, bunkers, intze tank and silo up to height 30 feet (9 m) above ground including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement .	100 Cft. Cu.m.	64,019.39 22,608.25

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S. No.	Description	Unit	Rate in Rs.
109	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in beam of required section in over head water tank, bins, bunkers, intze tanks and silo other than circular up to a height of 30 feet (9 m) above ground including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement .	100 Cft. Cu.m.	66,201.51 23,378.86
110	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in circular walls in over head water tanks, bins, bunkers intze tanks and silo up to a height of 30 feet (9 m) above ground including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement .	100 Cft. Cu.m.	61,461.94 21,705.10
111	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in walls of conical shape in over head water tanks bins, bunkers intze tanks and silo up to a height of 30 feet (9 m) above ground including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement..	100 Cft. Cu.m.	64,214.42 22,677.13
112	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in straight walls in over head water tank bins, bunkers, intze tanks and silo up to a height of 30 feet (9 m) above ground including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement..	100 Cft. Cu.m.	61,802.07 21,825.22
113	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in circular bottom slab of over head water tank up to a height of 30 feet (9 m) above ground including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement..	100 Cft. Cu.m.	63,725.58 22,504.50
114	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in a square of rectangular bottom slab of over head water tank up to a height of 30 feet (9 m) above ground including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement .	100 Cft. Cu.m.	58,806.38 20,767.30

REINFORCED CEMENT CONCRETE WORK

SUB-HEAD CODE 114

S. No.	Description	Unit	Rate in Rs.
115	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in bottom slab in dome type shape of over head water tank up to a height of 30 feet (9 m) above ground including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement .	100 Cft. Cu.m.	79,324.24 28,013.12
116	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in sloping bottom slab of bin, bunker, intze tanks and silo other than circular in shape up to a height of 30 feet (9 m) above ground including form works and its removal compacting and curing etc. complete but excluding the cost of reinforcement..	100 Cft. Cu.m.	63,779.93 22,523.69
117	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in conical bottom slab of circular bin, bunkers, intze up to a height of 30 feet (9 m) above ground including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement..	100 Cft. Cu.m.	82,277.43 29,056.03
118	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in roof slab of over head water tank up to a height of 30 feet (9 m) above ground including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement..	100 Cft. Cu.m.	53,198.78 18,786.99
119	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in roof slab in dome type shape roof up to 4 inches (102 mm) thickness of over head water tank up to a height of 30 feet (9 m) above ground including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement ..	100 Cft. Cu.m.	122,040.25 43,098.15
120	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in roof slab up to 3 inches (76 mm) thick simple barrel type of over head water tank up to a height of 30 feet (9 m) above ground including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement..	100 Cft. Cu.m.	63,156.06 22,303.37

REINFORCED CEMENT CONCRETE WORK

SUB-HEAD CODE 114

S. No.	Description	Unit	Rate in Rs.
121	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in conical roof slab of over head water tank bin, bunker intze and silo a height of 30 feet (9 m) above ground including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, ..	100 Cft. Cu.m.	87,975.61 31,068.32
122	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in folded plate or sloping roof slab of over head water tank bin, bunker intze tank and silo a height of 30 feet (9 m) above ground including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement	100 Cft. Cu.m.	56,214.37 19,851.94
123	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15-52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in straight railing with apertures in over head water tank, bin, bunker, intze tank and silo up to 3 inches (76 mm) thick and up to a height of 30 feet (9 m) from ground including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement.	100 Cft. Cu.m.	90,665.40 32,018.21
124	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in straight railing without apertures in over head water tank, bin, bunker, intze tank and silo up to 3 inches (76 mm) thick and up to a height of 30 feet (9 m) from ground including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement .	100 Cft. Cu.m.	71,967.26 25,415.02
125	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in circular railing with apertures in over head water tank bin, bunker, intze tank and silo up to 3 inches (76 mm) thick and up to a height of 30 feet (9 m) from ground including form works and its removal compacting and curing etc. complete but excluding the cost of reinforcement.	100 Cft. Cu.m.	110,496.10 39,021.37

REINFORCED CEMENT CONCRETE WORK

SUB-HEAD CODE 114

S. No.	Description	Unit	Rate in Rs.
126	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in circular railing without apertures in over head water tank, bin, bunker, intze tank and silo up to 3 ihches (76 mm) thick and up to a height of 30 feet (9 m) from ground including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement .	100 Cft. Cu.m.	80,480.34 28,421.39
127	Extra for every additional height to 5 feet (1.52 m) or part thereof above 30 feet (9 m) on item Nos. 107 to 126...	100 Cft. Cu.m.	1,983.80 700.57
128	Deduction for every lesser height of 5 feet (1.52 m) or part thereof below 30 feet (9 m) item Nos. 107 to 126..	100 Cft. Cu.m.	1,922.05 678.77
	MINARET AND CHIMNEY		
129	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in minaret or chimney up to 50 feet (15.24 m) height from ground level including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement .	100 Cft. Cu.m.	70,920.79 25,045.46
130	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15-52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in arches with solid spandrel of minaret up to 50 feet (15.24) height from ground level including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement...	100 Cft. Cu.m.	63,834.76 22,543.06
131	Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2250 lbs. per sq. inch (15.52 N/mm^2) at 28 days with a mix not leaner than 1:2:4 in arches with open spandrels of minaret up to 50 feet (15.24 m) height from ground level including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement..	100 Cft. Cu.m.	86,364.63 30,499.41
132	Extra for every additional height of 5 feet (1.52 m) or part thereof above 50 feet (15.24 m) from item Nos. 129 to 131.	100 Cft. Cu.m.	1,621.38 572.58
133	Deduct for every lesser height of 5 feet (1.52 m) or part thereof below 50 feet (15.24 m) from item Nos. 129 to 131.	100 Cft. Cu.m.	1,922.05 678.77

REINFORCED CEMENT CONCRETE WORK

SUB-HEAD CODE 114

S. No.	Description	Unit	Rate in Rs.
134	Extra for cement concrete with screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 2812 lbs. per sq. inch (19.39 N/mm^2) at 28 days with a mix not leaner than 1:1-1/2:3 instead of 1:2:4 .	100 Cft. Cu.m.	3,759.39 1,327.62
135	Extra for cement concrete with screened graded bajri 3/4 inch (19 mm) and down gauge as course aggregate having a minimum works cube crushing strength of 3770 lbs. per sq. inch (23.24 N/mm^2) at 28 days with a mix not leaner than. 1:1:2 instead of 1:2:4..	100 Cft. Cu.m.	11,392.77 4,023.32
136	Extra for using crushed graded boulders 3/4 inch (19 mm) and down gauge in place of screened graded bajri in any item of RCC of mix not leaner than 1:2:4 crushing strength of works cube in this case will be 3000 lbs. per sq. inch (20.69 N/mm^2 at 28 days) ..	100 Cft. Cu.m.	512.50 180.99
137	Extra for using crushed graded boulders 3/4 inch (19 mm) and down gauge in place of screened graded bajri in any item of RCC of mix not leaner than 1:1-1/2:3 (the crushing strength of works cube in this case will be 3750 lbs. per sq. inch (23.24 N/mm^2 at 28 days) ..	100 Cft. Cu.m.	481.25 169.95
138	Extra for using crushed graded boulders 3/4 inch (19 mm) and down gauge in place of screened graded bajri in any item of RCC of mix not leaner than 1:1:2 (the crushing strength of works cube in this case will be 4500 lbs. per sq. inch (31.04 N/mm^2 at 28 days) .	100 Cft. Cu.m.	450.00 158.92
139	Extra for using 50% crushed graded boulders 3/4 inch (19 mm) and down gauge and 50 % screened graded bajri 3/4 inch (19 mm) and down gauge instead of screened graded bajri in any item of RCC of mix not leaner than 1:2:4 (the crushing strength of works cube in this case will be approximately average of 2250 to 3000 lbs. per sq. inch (15.52 to 20.69 N/mm^2 at 28 days)..	100 Cft. Cu.m.	256.25 90.49
140	Extra for using 50 % crushed graded boulders 3/4 inch (19 mm) and down gauge instead of screened graded bajri in any item of RCC of mix not leaner than 1:1-1/2:3 cement concrete having the concrete strength of works cube in this case will be approximately average of 2812 to 3750 lbs. per sq. inch (19.39 to 23.34 N/mm^2 at 28 days) .	100 Cft. Cu.m.	240.63 84.98
141	Extra for using 50 % crushed graded boulders 3/4 inch (19 mm) and down gauge and 50 % screened graded bajri 3/4 inch (19 mm) and down gauge instead of screened graded bajri in any item of RCC of mix not leaner than 1:1:2. The crushing strength of works cube in this case will be approximately average of 3370 to 4500 lbs. per sq. inch (23.24 to 37.04 N/mm^2 after 28 days) .	100 Cft. Cu.m.	225.00 79.46
142	Extra if Lawrenecepur sand is used in place of local sand at Lahore, on any item of RCC of ratio 1:2:4, .	100 Cft. Cu.m.	1,947.50 687.75

REINFORCED CEMENT CONCRETE WORK

SUB-HEAD CODE 114

S. No.	Description	Unit	Rate in Rs.
143	Extra if Lawrenecepur sand is used in place of local sand at Lahore, on any item of RCC of ratio 1:1-1/2:3 .	100 Cft. Cu.m.	1,852.50 654.20
144	Extra if Lawrenecepur sand is used in place of local sand at Lahore, on any item of RCC of ratio 1:1:2 .	100 Cft. Cu.m.	1,710.00 603.88
145	Extra if Lawrenecepur sand is used in place of local sand at Rawalpindi on any item of RCC of ratio 1:2:4 .	100 Cft. Cu.m.	358.75 126.69
146	Extra if Lawrenecepur sand is used in place of local sand at Rawalpindi on any item of RCC of ratio 1:1-1/2:3	100 Cft. Cu.m.	341.25 120.51
147	Extra if Lawrenecepur sand is used in place of local sand at Rawalpindi on any item of RCC of ratio 1:1:2	100 Cft. Cu.m.	315.00 111.24
148	Extra if Lawrenecepur sand is used in placa;of local sand at Peshawar in item of RCC of ratio 1:2:4	100 Cft. Cu.m.	666.25 235.28
149	Extra if Lawrenecepur sand is used in place of local sand at Peshawar in item of RCC of ratio 1:1-1/2:3	100 Cft. Cu.m.	633.75 223.81
150	Extra if Lawrenecepur sand is used in place of local sand at Peshawar in item of RCC of ratio 1:1:2	100 Cft. Cu.m.	585.00 206.59
151	Providing and using in reinforced cement concrete 'cemto' as water proofing agent .	lb. gm	257.50 0.57
152	Providing and using in reinforced cement concrete 'cemcon' as water proofing agent	Imgl Litre	1,170.00 257.36
153	Providing and using pudlo in ordinary portland cement in item of RCC .	Cwt. kg	9,109.38 179.31
154	Providing and using sulphate resisting cement in place of ordinary portland cement in item of RCC..	Cwt. kg	237.50 4.67
155	Providing and using in RCC any approved retarding agent...........	Cwt. kg	2,493.75 49.09
156	Providing and using in RCC any approved wetting agent.	Imgl Litre	3,007.50 661.56
157	Providing and using in RCC "cement" (liquid) for quick setting and rapid hardening .	lb. gm	565.23 1.25
158	Providing and laying RCC columns of any shape and design on lean concrete of 1:12 for temporary coverage of steel including form work and its removal compacting etc. complete but excluding the cost of reinforcement, basement, plinth and ground floor..	100 Cft. Cu.m.	28,296.66 9,992.88
159	Extra for first floor on item No. 158.	100 Cft. Cu.m.	4,015.63 1,418.11
160	Extra for every additional floor over first floor on item No. 158.	100 Cft. Cu.m.	3,162.50 1,116.83

REINFORCED CEMENT CONCRETE WORK
SUB-HEAD CODE 114

S. No.	Description	Unit	Rate in Rs.
161	Extra for using M.S Plates / ply wood form work and M.S pipe folding in place of partal wood form work on item No. 23 to 29.	100 Cft.	5,183.40
		Cu.m.	1,830.50
162	Extra for using M.S Plates / ply wood form work and M.S pipe folding in place of partal wood form work on item No. 30 to 37, 100 to 102 ,110 to 112 , 123 to 126 and 129 to 131.	100 Cft.	10,851.38
		Cu.m.	3,832.13
163	Extra for using M.S Plates / ply wood form work and M.S pipe folding in place of partal wood form work on item No. 38 to 54, 108 to 109. .	100 Cft.	17,023.09
		Cu.m.	6,011.65
164	Extra for using M.S Plates / ply wood form work and M.S pipe folding in place of partal wood form work on item No. 55 to 91,103 to 106, 113 to 122.	100 Cft.	15,238.21
		kg	5,381.33
	REINFORCEMENT		
165	Providing and laying mild steel plain reinforcement bars (having menimum yield strength of 36,000 psi) with and including the cost of straightening, cutting, bending, binding, wastage, and such overlaps as are not shown over the drawings, placing in position on cement concrete 1:2:4 precast or m.s. chairs, tying with binding wire, cost of chair and wires etc. in all kinds of RCC work in foundation, basement, plinth and ground floor of building including septic tank and under ground tank and in projections for future extension .	Cwt.	12,929.87
		kg	254.51
166	Providing and laying hard grade ribbed deformed (minimum yield point 60,000 psi) reinforcement bars with & including the cost of straightening, cutting, bending, binding, wastage, and such overlaps as are not shown in the drawings, placing in position on cement concrete 1:2:4 precast or m.s. chairs, tying with binding wire, cost of chairs and wires etc. in all kinds of RCC work in foundation, basement, plinth and ground floor of building including septic tanks and under ground tanks and in projections for future extension .	Cwt.	14,349.01
		kg	282.45
167	Providing and laying ribbed deformed (minimum yield point 40,000 psi) reinforcement bars with & including the cost of straightening, cutting, bending, binding, wastage, and such overlaps as are not shown in the drawings, placing in position on cement concrete 1:2:4 precast or m.s. chairs, tying with binding wire, cost of chairs and wires etc. in all kinds of RCC work in foundation, basement, plinth and ground floor of building including septic tanks and under ground tanks and in projections for future extension .	Cwt.	13,548.87
		kg	266.70
168	Providing and laying cold worked twisted ribbed steel reinforcement bars with minimum yield stress of 60,000 psi with and including the cost of straightening, cutting, bending, binding, wastage, complete in all kinds of RCC work	Cwt.	13,946.66
		kg	274.53

REINFORCED CEMENT CONCRETE WORK

SUB-HEAD CODE 114

S. No.	Description	Unit	Rate in Rs.
169	Labour for mild steel reinforcement bars including straightening, cutting, bending, binding, placing in position on cement concrete 1:2:4 precast or m.s. chairs, tying with binding wire, etc. in all kinds of RCC work in foundation, basement, plinth and ground floor of building including septic tank and under ground tank and in projections for future extension.	Cwt. kg	643.38 12.66
170	Providing and laying hard grade ribbed deformed (minimum yield point 60,000 psi) reinforcement bars wrth and including the cost of straightening, cutting, bending, binding, wastage, and such overlaps as are not shown over the drawings, placing in position on cement concrete 1;2:4 precast or m.s. chairs, tying with binding wire, etc. cost of chair and wires etc. in overhead water tank bin. banker. intze tank and silo upto 30 feet (9 m) height .	Cwt. kg	13,970.01 274.99
171	Providing and laying hard grade ribbed deformed (minimum yield point 60,000 psi) reinforcement bars with and including the cost of straightening, removing twists, cutting, bending, binding, wastage, and such overlaps as are not shown over the drawings, placing in position on cement concrete 1:2:4 precast or m.s. chairs, tying with binding wire, etc. cost of chair and wires etc. in minaret and chimney upto 50 feet (15.20 m) height..	Cwt. kg	14,403.14 283.51
172	Labour for hard grade steel reinforcement bars with and including straightening, cutting, bending, binding, placing in position on cement concrete 1:2:4 precast or m.s. chairs, tying with binding wire, etc. upto 30 feet (9 m) height in overhead tank bin, bunker, intze tank and silo ..	Cwt. kg	885.25 17.43
173	Labour for hard grade steel reinforcement bars with and including straightening, cutting, bending, binding, placing in position on cement concrete 1:2:4 precast or m.s. chairs, tying with binding wire, etc. upto 50 feet (15.20 m) height in minaret and chimney .	Cwt. kg	1,346.50 26.50
174	Extra for lift in first floor on item Nos. 165,166, 167 and 168.	Cwt. kg	225.63 4.44
175	Extra for lift in every additional floor above first floor on item Nos. 165,166, 167 and 168.	Cwt. kg	225.63 4.44
176	Extra for every additional height of 5 ft. (1.52 m) or part thereof above 30 ft(9 m) on item No. 170 and 171	Cwt. kg	154.38 3.04
177	Extra for every additional height of 5 ft. (1.52 m) or part thereof above 50 ft(15.20 m) on item No. 170 and 171.	Cwt. kg	154.38 3.04
178	Deduct for every lesser height of 5 ft. (1.52 m) or part thereof below 30 ft. (9 m) on item No. 170.	Cwt. kg	118.75 2.34
179	Deduct for every lesser height of 5 ft. (1.52 m) or part thereof below 50 ft. (15.20 m) on item No. 171.	Cwt. kg	71.25 1.40

PRESTRESSED CONCRETE WORK

Code 115

PRESETRESSED CONCRETE WORK (SH-115)

Brief Specification

CEMENT:

Normal Portland cement shall comply with the requirements of B.S 12 1958 as detailed in Pak. P.W.D. specifications part1, Chapter No.4.

FINE AND COARSE AGREGATE:

These shall conform to Pak. PWD. Specifications part I detailed in Chapter No.6.

WATER:

Water shall comply to Pak. P.W.D. specifications part 1 detailed in Chapter No.1.

STEEL:

Steel shall comply to the Pak. P.W.D. specifications part 1 detailed in Chapter No.8.

CONCRETE AND ITS STRENGTH:

The minimum works cube strength at 7 days curing will be 3750 Ibs. Sq. inch and the minimum works cube strength at 28 days shall be 6,000 Ibs. Sq. inch.

REQUIREMENTS:

The following general clauses will be applicable to pre-stressed concrete works.

(i) Moulds for pre-stressed concrete work shall be of such a nature as to allow the concrete member to deform when the pre-stress is applied. This is parts of the mould should be removable.
(ii) In order to obtain concrete of uniform strength, where members are cast in a long line bed, the difference in strength at transfer between beams of the same type cast in the same line shall not exceed 15 percent.
(iii) Pre-stressed concrete work shall, unless otherwise specified, have smooth finish on all surfaces exposed in completed work.
(iv) Pre-stressed concrete shall be moist cured until the pre-stress is applied.
(v) In order that any applied force may be maintained after the tensioned steel has been anchored, an allowance must be made in assessing the value of the applied force for loss of stress due to the yield in the anchorages and for slip when the steel is wedged after tensioning.
(vi) With pre-tensioning, the specified force shall be maintained by the use of approved fixing devices at the ends of the tensioned steel during conereting and curing, until the concrete has attained the strength specified.
(vii) Measurement of the force shall be by an accurate gauge indicating the force on the hydraulic jack.
(viii) The pre-stressing force should be applied from one or both ends as specified on the drawings.

(ix) Each wire, pair of wires, cable, strand, or bar shall be attached in such a manner as to ensure that the elegation is uniform throughout its length.

(x) After tensioning, the wires, strands, or bars shall be secured in position and cut off as directed.

(xi) Nor cracks will generally be permitted.

(xii) The stressing operation shall not take place until the filling material in the joint has attained strength equal to at least 1-1/2 times the stress at transfer.

(xiii) The pressure at which the grout is to be pumped into the duct shall not normally exceed 80 Ibs. Per square inch.

(xiv) The grout for cables and bars shall be either cement (1:1) (one cement, one sand) or cement concrete 1:1:1-1/2 (one cement, one sand and 1-1/2 pea gravel). An expanding plasticising admixture may preferably be used.

(xv) Where grooves are provided in which the pre-stressing steel is placed, they shall be cleaned before the mortar is inserted.

(xvi) The test loadings may be such that (a) the calculated bending tensile stresses in the concrete will be 750 Ibs. Per square inch for beams with pre-tensioned steel and 650 Ibs. Per square inch for beams with post-tensioned steel and having a cube strength at 28 days about 7,500 Ibs. Per square inch, and (b) the calculated bending compressive stresses will not exceed 60 percent of the cube strength, whichever is the less. No visible cracks should appear when the full test load is applied.

(xvii) Before performance tests are commenced, the specified cube strength at 28 days must have been obtained.

(xviii) If visible hair cracks occur, or if the deflection at the centre at maximum load exceeds the given value, the pre-stressed member will be rejected. If the residual deflection after removal of loading exceeds 10 percent (for pre-tensioning) or 15 percent (for post-tensioning) of the measured maximum deflection, the beam may be rejected.

(xix) The loading for performance tests shall be applied by jacks calibrated to an accuracy of plus or minus 2 percent with provision for measurements of loads to the nearest 1/4 ton and deflection to 0.001 in.

PRETENNSIONED PRESTRESSED CONCRETE.

CASTING BEDS:

The cost of the casting bed and anchor posts, etc., shall be borne by the contractor himself and shall be considered to be inclusive in the rates quoted by the contractor.

PLACING AND TENSIONING STRANDS:

Power equipment such as a tag line from a winch at the far end of the bed is used to pull the strands into the bed. Sometimes a heavy block is hung from a crane, the strands are attached to the block, and the crane moves along the bed pulling out the strands.

FORMS

Forms shall be generally made of steel sections, i.e. joists, or double T sections to maintain accurate dimentions.

CONCRETING AND COMPECTION:

Concrete is placed using vibrators to ensure proper compaction of the low-slump mix.
Where live steam is used for accelerated curing, it is applied to the members through one or more pipes running the length of the bed.

POST TENSIONED PRESTRESSED CONCRETE:

The following should be checked before and during casting operations:

(a) Ensure that the cable projects an equal distance from each end of the concrete member.

(b) Immediately during initial setting of the concrete ensure that there is no serious blockage in the cable duct resulting from the penetration of cement mortar.

(c) Check the tightness of the anchorage positioning screws since these can sometimes be loosened during vibration.

(d) Ensure that the surface of the protruding wires of the cable is cleaned of mortar droppings or other deposits.

(e) Ensure that poker vibrators are used with extreme care in the vicinity of the cable sheath and that they do not touch, either sheath or anchorage cone.

(f) In order to prevent spilt concrete from entering the female anchorage cones it is necessary to plug the hole with paper.

(g) It is recommended to keep the hole in the female anchorage cone plugged in order to prevent dirt and water from entering it.

(h) Before commencing the stressing operation check carefully whether any laitance or dirt, is covering the inner coil of the female cone. If so clean before stressing.

HIGH TENSILE STEEL WIRE AND STRANDS FOR PRESTRESSING PURPOSE.

Length and cross-section of the wire/strand will be measured before subjecting it to prestressing force. Its weight per foot of length will however be taken. Additional length required for projecting beyond the prestressing member for jacking, its clearance and gaps between members arranged in series and stressed together as well as wastages involved in cutting for required length initially and finally for the projections beyond the pre-stressing member will not be paid for and will be considered to have been included in contractors rate for the items.

CABLE:

A Freyssinet cable means 12 high tensile wires laid parallel to each other and taped together.

CORE HELIX:

Unstretched length of core helix will be measured.

CABLE SHEATH:

Superficial length will be measured in straight portion and for curved length average of the inner and outer curved lengths will be taken. No Extra length will be all owed for telescopic jointing or for coupling with couplers.

PAKISTAN PUBLIC WORKS DEPARTMENT

PRESTRESSED CONCRETE WORK

SUB-HEAD CODE 115

S. No.	Description	Unit	Rate in Rs.
	Post Tensioned Prestressed Concrete (Freyssinet System).		
1	Supplying high tensile steel wires size upto 0.276 inch (7.01 mm) dia for prestressed concrete as specified 1/C cutting, wastage (untensioned length finally used in the prestressed member to be measured for the purpose of payment).	Ton	306,720.98
		Tonne	300,706.84
2	Supplying high tensile steel strand upto 1/2 inch (15 mm) dia single or in groups of 4,7 and 12 for prestressed concrete as specified I/C cutting, wastage funtensioned length finally used in the prestressed member to be measured for the purpose of payment).	Ton	262,368.98
		Tonne	257,224.49
3	Supplying standard freyssinet helical core for cable size 12/0.200 inches (12/5.08 mm) dia including cutting, wastage etc. complete (closed helic length to be measured).	Rft.	290.40
		Ru.m	952.76
4	Supplying standard freyssinet helical core for cable size 12/0.276 inches (12/7.01 mm) dia including cutting, wastage etc. complete (closed helic length to be measured)..	Rft.	290.40
		Ru.m	952.76
5	Fabricating 12/0.200 inches (12/5.08 mm) dia cable with high tensile steel wires/strands around helical core including stretching of helix as required including passing through guides (forming mandrel) properly tied and including cost of binding wires, tapes etc. complete...	100 Rft.	2,320.32
		Ru.m	76.13
6	Fabricating 12/0.276 inches (12/7.01 mm) dia cable with high tensile steel wires/strands around helical core including stretching of helix as required including passing through guides (forming mandrel) properly tied and including cost of forming mandrel of binding wires, tapes etc. complete.	100 Rft.	14,354.32
		Ru.m	470.94
7	Providing and fixing hydra-rigid sheath size 32 mm internal dia and 47 mm external dia 1/C jointing sheath with threaded couplers, tapes etc. complete.	Rft.	255.53
		Ru.m	838.35
8	Providing and fixing hydra-rigid sheath size 42 mm internal dia and 48 mm external dia 1/C jointing sheath with threaded couplers, tapes etc. complete...	Rft.	304.13
		Ru.m	997.79
9	Providing and fixing freyssinet (Pak) self coupling welded steel sheath 32 mm internal dia and 37 mm external dia including threading (inserting) cables in sheath, telescopic jointing, taping and binding as per specifications.	Rft.	209.33
		Ru.m	686.78
10	Providing and fixing freyssinet (Pak) self coupling welded steel sheath 42 mm internal dia and 48 mm external dia including threading (inserting) cables in sheath, telescopic, jointing, taping and binding as per specification..	Rft.	140.03
		Ru.m	459.42

PRESTRESSED CONCRETE WORK
SUB-HEAD CODE 115

S. No.	Description	Unit	Rate in Rs.
11	Supplying, fabricating and fixing form work for the prestressed concrete beams of all sections including removal of form work as per direction of the Engineer-in-Charge..	100 Sq.ft. Sq.m.	5,973.63 643.00
12	Providing and fixing 12/0.200 inches (12/5.08 mm) dia freyssinet anchorages to beams ends and top surface of beams (if no end block is used) in sets of one female cone and one male cone complete with inserts, holding device, lining on the face of female cone with gasket, interior with high tensile spiral and the male outer with carborundum coating, ferrule connection etc. complete.	Set	20,003.50 20,003.50
13	Providing and fixing 12/0.276 inches (12/7.01 mm) freyssinet anchorages to beams ends and top surface of beams (if no end block is used) in sets of one female cone and one male cone complete with inserts, holding device, lining on the face of female cone with gasket, interior with high tensile spiral and the male outer with carborundum coating, ferrule connection etc. complete...	Set	20,003.50 20,003.50
14	Extra over item 12,13 if RCC precast end block is used having dense homogenous concrete mix not leaner than 1:1:2 with crushed stone of approved size and of minimum works cube crushing strength of 6000 Lbs/Sq.inch (37.18 N/mm2) at 28 days form work and its removal, compacting with vibrators and curing, providing and fixing steel hooks including lifting and placing blocks in position within 100. ft. (30.5 m) lead and 5 ft. (1.52 m) lift, but excluding cost of reinforcement..	Cft. Cu.m.	650.06 22,956.63
15	Providing and fixing 1-1/2 inches (40 mm) internal dia.steel pipe of 10 B.W.G. at end of prestressing cable as per direction of the Engineer-in-Charge..	Rft. Ru.m	279.10 915.67
16	Placing prefabricated cables carefully with sheath in the form-work to correct profile as per design and drawing including looping and attaching wires at non jacking end (beam length to be measured).	100 Rft. Ru.m	1,457.50 79.69
17	Providing and laying M.S. bars of specified grade including fixing in position untensioned steel reinforcement as per drawing and design including straightening, removing twists, cutting, bending, binding, overlaps, wastage and the cost of cement concrete or M.S. chairs and the cost of binding wire etc. complete..	Ton Tonne	223,547.58 219,164.29
18	Providing and laying high tensile steel of specified grade including fixing in position untensioned steel reinforcement as per drawing and design including straightening, removing, twists, cutting bending, binding, overlaps, wastage and the cost of cement concrete or M.S. chairs and the cost of binding wire etc. complete..	Ton Tonne	245,101.73 240,295.81
19	Providing and laying reinforced cement concrete using crushed graded stone 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 6.000 Lbs/Sq. inch (41.38 N/mm 2) at 28 days with a mix not leaner than 1:1:2 in the prestressed concrete work, in beams, griders and slabs compacting with vibrators (Immersion or screen or both) and curing but excluding cost of reinforcement..	100 Cft. Cu.m.	46,438.66 16,409.42

PRESTRESSED CONCRETE WORK

SUB-HEAD CODE 115

S. No.	Description	Unit	Rate in Rs.
20	Stressing freyssinet cables upto 12/0.276 size (12/7.01 mm) and of any length with stressing jacks etc., to appropriate strength in beams as per specifications including all arrangements, supply of recorded data in triplicate and anchoring cable till release; complete as per direction of the Engineer-in-Charge..	Cable	974.79 974.79
21	Injecting cement mortar 1:1 (1 cement and 1 sand) grout in freyssinet prestressed cables of any dia & length under pressure as per specifications..	100 Rft. Ru.m	1,585.34 52.01
22	Injecting cement mortar 1:1:1-1/2 (1 cement, 1 sand and 1-1/2 pea gravel) grout in freyssinet pre-stressed cables of any dia & length under pressure as per specifications..	100 Rft. Ru.m	1,604.81 52.65
23	Cutting off and trimming ends of post-tensioned prestressed 12/0.200 inches (12/5.08 mm) dia cables.....	Each Cable	389.40 389.40
24	Cutting off and trimming ends of post-tensioned prestressed 12/0.276 inches (12/7.01 mm) dia cables.....	Each Cable	454.30 454.30
25	Making good requisite anchorage recesses with C.C. 1:1:2 using crushed stone of approved size including form work and its removal and curing etc. complete..	Job	792.00 792.00
26	Stacking post-tensioned beam upto 50 ft. (15.2 m) length (Precast within a lead of 500 feet (153 m) including loading unloading, as per direction of the Engineer-in-Charge.	100 Cft. Cu.m.	5,597.17 1,976.62
27	Stacking post-tensioned beam above 50 ft.(15.2 m) upto 100 ft. (30.5 m) length (Precast) with in a lead of 500 feet (153 m) including loading, unloading as per direction of the Engineer-in-Charge..	100 Cft. Cu.m.	6,755.83 2,385.80
28	Hoisting post tensioned beam upto 50 ft.(15.2 m) length (Precast) by mechanical appliances upto lift of 18 ft.(5.49 m) above ground level and placing in position as per direction of the Engineer-in-Charge.	100 Cft. Cu.m.	5,092.80 1,798.51
29	Hoisting post-tensioned beam above 50 ft.(15.2 m) upto 100 ft.(30.5 m) length (Precast) by mechanical appliances upto lift of 18 ft.(5.49 m) above ground level and placing in position as per direction of the Engineer-in-Charge.	100 Cft. Cu.m.	5,272.00 1,861.79
30	Extra for every 12 feet (15.2 m) additional lift on item No.28..	100 Cft. Cu.m.	2,324.85 821.01
31	Extra for every 12 feet (15.2 m) additional lift on item No.29..	100 Cft. Cu.m.	1,870.00 660.38
	Post Tensioned Prestressed Concrete under Cables Ltd.		
32	Supplying 1/2 inch (13 mm) dia high tensile steet strands for prestressed concrete as specified in 1-1/2 inch (38 mm) 4-1/2 inch (115 mm). 7-1/2 inch (190 mm) and 12-1/2 (318 mm) groupings of cables including cutting, wastage (untensioned length finally used in the prestressed member to be measured for the purpose of payment)...	Ton Tonne	262,368.98 257,224.49

PRESTRESSED CONCRETE WORK

SUB-HEAD CODE 115

S. No.	Description	Unit	Rate in Rs.
33	Providing and fixing 3 inches (76 mm) dia (for 12-1/2 inch or 318 mm cable) hydra rigid or equivalent welded sheath with couplers etc. complete as specified..	Rft. Ru.m	1,532.85 5,029.04
34	Providing and fixing 2 inches (50 mm) dia (for 7-1/2 inch or 190 mm cable) hydra rigid or equivalent welded sheath wrth couplers etc. complete as specified..	Rft. Ru.m	700.21 2,297.26
35	Providing and fixing 1-3/4 inches (45 mm) dia for 4-1/2 inch or 115 mm cable) hydra rigid or equivalent welded sheath with couplers etc. complete as specified..	Rft. Ru.m	529.76 1,738.06
36	Providing and fixing 1-1/4 inches 32 mm) dia (for 1-1/2 inch or 38 mm cable) hydra rigid or equivalent welded sheath with couplers etc. complete as specified...	Rft. Ru.m	279.35 916.49
37	Supplying and fixing standard cable cover Ltd. (Great Britain) anchorage cones complete with end plates, ancarite grips etc. complete as per specification for 12-1/2 inch (318 mm) cables.	Set	66,858.00 66,858.00
38	Supplying and fixing standard cable cover Ltd. (Great Britain) anchorage cones complete with end plates, ancarite grips etc. complete as per specification for 7-1/2 inch (190 mm) cable..	Set	32,587.50 32,587.50
39	Supplying and fixing standard cable cover Ltd. (Great Britain) anchorage cones complete with end plates, ancarite grips etc. complete as per specification for 4-1/2 inch (115 mm) cable..	Set	17,334.90 17,334.90
40	Supplying and fixing standard cable cover Ltd. (Great Britain) anchorage cones complete with end plates, ancarite grips etc. complete as per specification for 1-1/2 inch (38 mm) cable.	Set	4,374.70 4,374.70
41	Making and attaching cables complete as per specification and drawings consisting of 12-1/2 inch (318 mm) cable...	Rft. Ru.m	59.40 194.88
42	Making and attaching cables complete as per specification and drawings consisting of 7-1/2 inch (190 mm) cable......	Rft. Ru.m	42.19 138.41
43	Making and attaching cables complete as per specification and drawings consisting of 4-1/2 inch (115 mm) cable.	Rft. Ru.m	30.19 99.04
44	Making and attaching cables complete as per specification and drawings consisting of 1-1/2 inch (38 mm) cable......	Rft. Ru.m	14.44 47.37
45	Supplying, fabricating and fixing form work in prestressed concrete beams of all sections including removal of form work as per direction of the Engineer-in-Charge .	100 Sq.ft. Sq.m.	6,785.06 730.34
46	Placing prefabricated cables carefully with sheath in the form work to correct profile as per design and drawing, including looping and attaching wires at non-jacking end (beams length to be measured).	100 Rft. Ru.m	1,658.25 54.40

PRESTRESSED CONCRETE WORK
SUB-HEAD CODE 115

S. No.	Description	Unit	Rate in Rs.
47	Providing and laying reinforced cement concrete using crushed graded stone 3/4" (19 mm) and down gauge having a minimum works cube crushing strength of 6,000 Lbs, per sq. inch (41.38 N/mm 2) at 28 days with a mix not leaner than 1:1:2 in prestressed concrete work, in beams, griders and slabs compacting with vibrators (immersion or screen or both) and curing but-excluding cost of reinforcement.	100 Cft. Cu.m.	40,866.02 14,440.29
48	Providing and laying M.S. bars of specified grade including fixing in position untensioned steel reinforcement as per drawing and design including straightening removing twists, cutting, bending, binding overlaps, wastage and the cost of cement concrete or M.S. chairs and the cost of binding wire etc. complete.	Ton Tonne	223,547.58 219,164.29
49	Providing and laying high tensile steel of specified grade including fixing in position untensioned steel reinforcement as per drawing and design including straightening, removing twists, cutting, bending, binding overlaps, wastage and the cost of cement concrete or M.S. chairs and the cost of binding wire etc. complete..	Ton Tonne	245,101.73 240,295.81
50	Supplying and fixing anchorage cable couplers as per specification for 12-1/2 inch (318 mm) cable..	Each	74,700.00 74,700.00
51	Supplying and fixing anchorage cable couplers as per specification for 7-1/2 inch (190 mm) cable.	Each	37,350.00 37,350.00
52	Supplying and fixing anchorage cable couplers as per specifications for 4-1/2 inch (115 mm) cable..	Each	21,780.00 21,780.00
53	Supplying and fixing anchorage cable couplers as per specifications for 1-1/2 inch (38 mm) cable..	Each	10,081.50 10,081.50
54	Stressing C.C.L. cable with stressing jacks etc. to appropriate strength in beams as per specifications including all arrangements supply of recorded data in triplicate, anchoring cables till release for 12-1/2 inch (318 mm) cable as per direction of the Engineer-in-Charge .	Cable	1,321.35 1,321.35
55	Stressing C.C.I-, cables with stressing jacks etc. to appropriate strength in beams as per specifications including all arrangements, supply of recorded data in triplicate, anchoring cables till release for 7-1/2 inch (190 mm) cable as per direction of the Engineer-in-Charge......	Cable	1,104.00 1,104.00
56	Stressing C.C.L. cables with stressing jacks etc. to appropriate strength in beams as per specifications including all arrangements, supply of recorded data in triplicate, anchoring cables till release for 4-1/2 inch (115 mm) cable as per direction of the Engineer-in-Charge.	Cable	876.30 876.30
57	Stressing C.C.L. cables with stressing jacks etc. to appropriate strength in beams as per specifications including all arrangements, supply of recorded data in triplicate, anchoring cables till release for 1-1/2 inch (38 mm) cable as per direction of the Engineer-in-Charge.	Cable	333.72 333.72

PRESTRESSED CONCRETE WORK
SUB-HEAD CODE 115

S. No.	Description	Unit	Rate in Rs.
58	Injectiog cement grout in C.C.L. prestressed cables under pressure as specified in proportion 1:1 (1, cement 1, sand) for 12-1/2 inch (318 mm) cable..	Rft.	174.04
		Ru.m	571.00
59	Injecting cement grout in C.C.L. prestressed cables under pressure as specified in proportion 1:1 (1, cement 1, sand) for 7-1/2 inch (190 mm) cable..	Rft.	89.17
		Ru.m	292.54
60	Injecting cement grout in C.C.L prestressed cables under pressure as specified in proportion 1:1 (1, cement 1, sand) for 4-1/2 inch (115 mm) cable..	Rft.	64.91
		Ru.m	212.91
61	Injecting cement grout in C.C.L prestressed cables under pressure as specified in proportion 1:1 (1, cement 1, sand) for 1-1/2 inch (38 mm) cable.	Rft.	39.50
		Ru.m	129.56
62	Cutting off and trimming ends of post-tensioned prestressed cables for 12-1/2 inch (318 mm)..	Each Cable	406.04
			406.04
63	Cutting off and trimming ends of post-tensioned. prestressed cables for 7-1/2 inch (190 mm).	Each Cable	324.83
			324.83
64	Cutting off and trimming ends of post-tensioned prestressed cables for 4-1/2 inch (115 mm)..	Each Cable	216.39
			216.39
65	Cutting off and trimming ends of post-tensioned prestressed cables for 1-1/2 inch (38 mm).	Each Cable	129.83
			129.83
66	Making good requisite anchorage recesses with cement concrete 1:1:2 using crushed stone of approved size including form-work and its removal and curing etc. complete.	Job	792.00
		Job	792.00
	Post Tensioned Prestressed Concrete.		
67	Supplying high tensile wire sizes upto 0.276 inch (7.01 mm) dia for prestressed concrete as specified including cutting wastage (untensioned length finally used in the prestressed member to be measured for the purpose of payment)..	Ton	306,720.98
		Tonne	300,706.84
68	Supplying high tensile strands upto 1/2 inch (13 mm) dia single or in groups of 4,7 and 12 for prestressed concrete as specified including cutting, wastage (untensioned length finally used in the prestressed member to be measured for the purpose of payment).	Ton	262,368.98
		Tonne	257,224.49
69	Supplying, fabricating and fixing form-work in the prestressed concrete beams of all sections including removal of form-work as per direction of Engineer-in-Charge.	100 Sq.ft.	5,973.63
		Sq.m.	643.00
70	Supplying, fabricating and fixing form-work in the prestressed concrete slabs of all sizes upto 3 inches (76 mm) thick including removal of form-work as per direction of Engineer-in-Charge.	100 Sq.ft.	6,304.21
		Sq.m.	678.58

PRESTRESSED CONCRETE WORK

SUB-HEAD CODE 115

S. No.	Description	Unit	Rate in Rs.
71	Assembling placing and attaching prestressing for wire sizes upto 0.276 inch (7.01 mm) dia including its looping and attaching at non-jacking end and the cost of binding wires/strands etc. Complete (length finally used to be measured)..	100 Rft. Ru.m	157.50 5.17
72	Assembling placing and attaching prestressing for strands upto 1/2 inch (13 mm) dia single or in groups of 4,7 and 12 including its looping and attaching at non-jacking end and the cost of binding wires/strands, etc. complete (length finally used to be measured).	100 Rft. Ru.m	402.91 13.22
73	Stressing the wire sizes upto 0.276 inch (7.01 mm) dia with stressing jacks etc. to appropriate strength in the prestressed concrete work including providing end anchorages and its removal as per specification, supply of recorded data in triplicate, anchoring wires or strands till release as per direction of Engineer-in-Charge.	Wire	456.50 456.50
74	Stressing the strands, upto 1/2 inch (13 mm) dia single or in group 4, 7 and 12, with stressing jacks etc, to aporopriate strength in the prestressed concrete work including providing and anchorages and its removal as per specification, supply of recorded data in triplicate, anchoring wires or strands till release as per direction of Engineer-in-Charge..	Strand	925.10 925.10
75	Cutting off and trimming the ends of pretensioned wire size upto 0.276 inch (7,01 mm) dia.	Each Wire End	135.21 135.21
76	Cutting off and trimming the ends of pretensioned strands upto 1/2 inch (13 mm) dia single or in groups of 4,7 and 12..	Each Strand	270.42 270.42
77	Stacking pretensioned slab upto 50 sft. (4.64 sm) area (precast) within a lead of 500 ft (152.4 m) including loading and unloading as per direction of the Engineer-in-Charge.	100 Cft. Cu.m.	5,597.17 1,976.62
78	Stacking pretensioned slab upto 50 sft. (4.64 sm) upto 100 sft. (9.29 sm) area (precast) within a lead of 500 ft (152.4 m) including loading and unloading as per direction of the Engineer-in-Charge.	100 Cft. Cu.m.	6,485.60 2,290.37
79	Stacking pretensioned beams upto 50 ft. (15.2 m) length (precast) within a lead of 500 ft. (152.4 m) including loading and unloading as per direction of Engineer-in-Charge....,	100 Cft. Cu.m.	5,597.17 1,976.62
80	Stacking pretensioned beams above 50 ft. (15.2 m) upto 100 ft. (30.5 m) length (precast) within a lead of 500 ft. (152.4 m) including loading and unloading as per direction of the Engineer-in-Charge.	100 Cft. Cu.m.	6,485.60 2,290.37
81	Hoisting post-tensioned slab upto 50 sft. (4.64 sm) area (precast) by mechanical appliances upto lift of 18 ft. (5.49 m) above ground level and placing in position as per direction of the engineer-in-Charge.	100 Cft. Cu.m.	5,267.00 1,860.03
82	Hoisting post-tensioned slab above 50 sft. (4.64 sm) upto 100 sft. (9.29 sm) area (precast) by mechanical appliances upto lift of 18 ft. (5.49 m) above ground level and placing in position as per direction of the Engineer-in-Charge...	100 Cft. Cu.m.	5,052.33 1,784.22

PRESTRESSED CONCRETE WORK

SUB-HEAD CODE 115

S. No.	Description	Unit	Rate in Rs.
83	Hoisting post-tensioned beam upto 50 ft. (15-2 m) length (precast) by mechanical appliances upto lift or 18 ft. (5.49 m) above ground level and placing in position as per direction of the Engineer-in-Charge.	100 Cft. Cu.m.	4,908.20 1,733.32
84	Hoisting posttensioned beams above 50 ft. (15.2 m) upto 100 ft. (30.5 m) length (precast) by mechanical appliances upto lift of 18 ft. (5.49 m} above ground level and placing in position as per direction of the Engineer-in-Charge..	100 Cft. Cu.m.	5,052.33 1,784.22
85	Extra for every 12 ft. (3.66 m) lift upto any height beyond 18 ft (5.49 m) on item No.84 to 87.	100 Cft. Cu.m.	2,750.84 971.45
86	Extra for every 12 ft. (3.66 m) lift upto any height beyond 18 ft (5.49 m) on item No. 84 to 87..	100 Cft. Cu.m.	1,337.50 472.33

ROOFING OTHER THAN R.C.C.

Code 116

ROOFING OTHER THAN R.C.C. (SH-116)

Brief Specifications

1. Galvanized Corrugated iron Roof Covering / Roofing:-

i) Sound Galvanized corrugated iron sheet conforming to latest B.S.S. of the specified gauge un-damaged in carriage shall be used. The sheets to be made of tough mild steel well annealed, even in temper and thickness; free from holes, cracks, blisters and other defects. The sheets to be perfectly rectangular, the corrugations parallel with the sides and regular in curve, pitch and depth. The corrugations are to be made of standard pattern.

ii) The Galvanizing should be intact and not damaged or rubbed off. Galvanized steel sheets to be thoroughly and evenly coated with Zinc, and to be free from stains, bare spots and other defects.

iii) The sheets to be laid with laps of 6 inches / 150 mm. at the ends and of 2 corrugations at the sides.

iv) Laying will be done from the side apposite to that of the prevailing wind direction.

v) The holes for the galvanized iron screws or bolts will be drilled (not punched) from the inside towards outside about 9 inches / 220 m.m. apart on the sides and at every second corrugation on the end.

vi) The sheet will be set carefully on the purloins and fastened by approved fastening galvanized iron screws with washers as may be shown on the drawing or as directed by the Engineer-In-Charge.

vii) Ridges and hips to be of approved gauge with a 12 inches / 300m.m. lap on side securely fastened down, so as to prevent rain driving under it.

viii) Measurements shall be for net superficial area inclusive of overlaps.

2. Asbestos Cement Corrugated Roof Covering:-

i) The sheets shall be the specified thickness and shall conform to the latest B.S.S. or as directed by the Engineer-In-Charge.

ii) The minimum end lap of asbestos sheet is six inches which may be increased in case it is necessary to adjust the length.

iii) No extra payment will be made due to any increase in length of the over lap.

iv) At the junction of the horizontal and vertical laps the sheet will be mitered. The miter is cutting off the corners of two sheets and is triangular in shape.

v) The fixing will be done with J-hooks made of galvanized iron bars 3/16" inches/5 m.m. diameter.

vi) Measurement shall be for net superficial area inclusive of all overlaps and accessories.

Note: For more details specifications for building and road works Pak. P.W.D., may be consulted.

3. **Cement Concrete Tiles Roof On Battens / Rafters:-**

i) Cement concrete tiles shall be in 1:2:4 cement concrete 1.5 inches / 38 m.m. thick or as specified in the item of work.

ii) If burnt clay tiles are used, shall be either 1.5 to 2 inches / 38 m.m. to 50 m.m. thick with dimension as specified in the item of work.

iii) Tiles shall be laid in 1:3 cement mortar over the batten with flushing of the same mortar on the top and side for proper grouting.

iv) After the mortar has set, cement concrete 1:2:4: with an average thickness of 4 inches / 100 m.m. shall be laid on the top of tiles.

v) The concrete shall be rounded at the junctions of the roofs and parapet to a radius of 4" inch / 100 m.m. giving a convex curves.

vi) The roof surface is to be covered with a layer of matting over 1 inch / 25 m.m. of sand and kept wet for a period of not less than 14 days.

vii) Measurement shall be for the net roof area.

4. Puddled Earth Roofing:-

General :- This type of roof shall comprise of 1:2:4 cement concrete tiles / burnt bricks tiles over roof with 4 inch / 100 m.m. average thick puddled earth laid to a proper slop.

i) Clay shall be of a quality to be approved by the Engineer-In-Charge before use.

ii) Before use the clay shall be tempered by soaking in water for at least 12 hours.

iii) The clay is to be worked into puddle before use by turning it over with phauras and treading it under feet into a homogenous mass of tough consistency approved by the Engineer-In-Charge.

iv) The puddle shall after worked up be kneaded into balls and laid in 6 inches / 15 c.m. layer, each layer being well trodden and thoroughly rammed.

v) On no account shall the puddle be allowed to crack, if it does, the cracked surface is to be dug up and the puddle re-made.

vi) However, if the shrinkage cracks appear after 2 or 3 days, more puddle mixed with Goober shall be leaped on the surface to make it water tight.

vii) Measurement shall be for the net roof area.

5. Ceiling:-

General — Ceiling is normally provided to improve appearance of roofs interior, to reduce the air conditioning load and to conceal any service ducts or piping lines running along the roof.

i) The material for ceiling may be of soft board, hard board, A.C. sheets, specially perforated acoustic board and plaster of Paris pre-caste ceiling panels etc. shall be according to the provision made for the item of work and its thickness and dimensions shall also conform to the item of work as directed by the Engineer-In-Charge.

ii) Frame either wooden, steel or aluminum shall be suspended from the surface or provided as a rigid frame as per design and as required by the Engineer-In-Charge.

iii) Fixing of ceiling board or tiles could either by screws or by special clips depending upon the design of the ceiling frame and shall be carried out as per direction of Engineer-In-Charge.

iv) Fixing of the ceiling shall also be required by providing of beading of either wooden strips or any other metallic strips as required in the work.

v) For venting purpose in case of board or hard board, soft board or A.C. sheets ceiling, 1/2 inch / 13 m.m. diameter holes shall be provided in the end panels as directed by the Engineer-In-Charge.

i) Measurements shall be for net superficial area.

PAKISTAN PUBLIC WORKS DEPARTMENT

ROOFING OTHER THAN R.C.C. AND CEILINGS

SUB-HEAD CODE 116

S. No.	Description	Unit	Rate in Rs.
1	Providing and fixing 18 B.W.G. corrugated galvanized iron sheets with galvanized iron hooks, bolts, nuts, limpets and bitumen washers etc. without valleys and ridges (excluding the cost of frame work) in ground floor.	100 Sq.ft Sq.m.	53,259.39 5,732.79
2	Providing and fixing 20 B.W.G. corrugated galvanized iron sheets with galvanized iron hooks, bolts, nuts, limpets and bitumen washers etc. without valleys and ridges (excluding the cost of frame work) in ground floor.	100 Sq.ft Sq.m.	41,625.92 4,480.57
3	Providing and fixing 22 B.W.G. corrugated galvanized iron sheets with galvanized iron hooks, bolts, nuts, limpets and bitumen washers etc, without valleys and ridges (excluding the cost of frame work) in ground floor..	100 Sq.ft Sq.m.	34,981.43 3,765.37
4	Providing and fixing 24 B.W.G. corrugated galvanized iron sheets with galvanized iron hooks, bolts, nuts, limpets and bitumen washers etc, without valleys and ridges (excluding the cost of frame work) in ground floor.	100 Sq.ft Sq.m.	29,369.95 3,161.35
5	Providing and fixing 26 B.W.G. corrugated galvanized iron sheets with galvanized iron hooks, bolts, nuts, limpets and bitumen washers etc. without valleys and ridges (excluding the cost of frame work) in ground floor..	100 Sq.ft Sq.m.	24,177.96 2,602.49
6	Extra for corrugated G.I. Sheeting in item Nos. 1,2,3,4, and 5 if fixed on curved frame surface to a minimum radius of 4 ft. (1-22 m) in ground floor.	100 Sq.ft Sq.m.	1,288.13 138.65
7	Providing and fixing with galvanized iron hooks, bolts and galvanized iron and bitumen washers, corrugated asbestos cement sheets roofing 1/4 inch (6.4 mm) thick without valleys and ridges (excluding the cost of frame work) in ground floor.	100 Sq.ft Sq.m.	38,262.27 4,118.51
8	Providing and fixing with galvanized iron hooks, bolts and galvanized iron and bitumen washers corrugated asbestos cement sheets roofing, coloured dadex sheet type 2 or its equivalent. 5/32 inches (4 mm) thick without valley and ridges etc, (excluding the cost of frame work) in ground floor..	100 Sq.ft Sq.m.	23,983.02 2,581.51
9	Providing and fixing P.V.C. corrugated translucent sheets of approved colour with galvanized iron hooks, bolts, nuts, screws and washers etc, without valleys and ridges etc, (excluding the cost of wood work) in ground floor..	100 Sq.ft Sq.m.	30,127.90 3,242.94
10	Providing and fixing P.V.C. corrugated transparent sheets of approved colour with galvanized iron hooks, bolts, nuts, screws and washers etc, without valleys and ridges etc, (excluding the cost of wood work) in ground floor.	100 Sq.ft Sq.m.	30,127.90 3,242.94

ROOFING OTHER THAN R.C.C. AND CEILINGS

SUB-HEAD CODE 116

S. No.	Description	Unit	Rate in Rs.
11	Providing and fixing 18 B.W.G. corrugated galvanized iron sheets standard ridges with galvanized iron bolts, nuts limpets and bitumen washers etc. complete in ground floor.	Rft. Ru.m.	820.55 2,692.09
12	Providing and fixing 20 B.W.G. corrugated galvanized iron sheets standard ridges with galvanized iron bolts, nuts, limpets and bitumen washers etc. complete in ground floor.	Rft. Ru.m.	667.00 2,188.31
13	Providing and fixing 22 B.W.G. corrugated galvanized iron sheets standard ridges with galvanized iron bolts, nuts, limpets and bitumen washers etc. complete in ground floor.	Rft. Ru.m.	564.19 1,851.00
14	Providing and fixing 24 B.W.G. corrugated galvanized iron sheets standard ridges with galvanized iron bolts, nuts, limpets and bitumen washers etc, complete in ground floor..	Rft. Ru.m.	485.34 1,592.31
15	Providing and fixing 26 B.W.G. corrugated galvanized iron sheet standard ridges with galvanized iron bolts, nuts, limpets and bitumen washers etc. complete in ground floor.	Rft. Ru.m.	410.64 1,347.23
16	Providing and fixing 18 B.W.G. plain galvanized iron sheets standard ridges with galvanized iron bolts, nuts, limpets and bitumen washers etc. complete in ground floor.	Rft. Ru.m.	752.42 2,468.56
17	Providing and fixing 20 B.W.G. plain galvanized iron sheets standard ridges with galvanized iron bolts, nuts, limpets and bitumen washers etc. complete in ground floor.........	Rft. Ru.m.	605.85 1,987.71
18	Providing and fixing 22 B.W.G. plain galvanized iron sheets standard ridges with galvanized iron bolts, nuts, limpets and bitumen washers etc. complete in ground floor.........	Rft. Ru.m.	506.85 1,662.91
19	Providing and fixing asbestos cement two pieces close fitting adjustable ridges or adjustable hip ridges 1/4 inch (6.4 mm) thick (grey) with bolts and nuts etc. in ground floor..	Rft. Ru.m.	606.70 1,990.49
20	Providing and fixing two pieces plain wing adjustable asbestos cement ridges 1 /4 inch (6.4 mm) thick (grey) with bolts and nuts etc. in ground floor.	Rft. Ru.m.	606.70 1,990.49
21	Providing and fixing two pieces close fitting adjustable asbestos cement ridges 5/32 inches (4 mm) thick (coloured other than grey) with bolts, nuts, and washers etc. in ground floor..	Rft. Ru.m.	514.35 1,687.52
22	Providing and fixing two piece plain wing adjustable asbestos cement hip ridges 5/32 inches (4 mm) thick (coloured other than grey) with bolts, nuts and washers etc. in ground floor..	Rft. Ru.m.	389.83 1,278.97
23	Providing and fixing one piece plain angular asbestos cement ridge (grey) without bolts and nuts etc. in ground floor.	Rft. Ru.m.	182.57 598.97

ROOFING OTHER THAN R.C.C. AND CEILINGS

SUB-HEAD CODE 116

S. No.	Description	Unit	Rate in Rs.
24	Providing and fixing two piece adjustable asbestos cement ridge finials (grey) without bolts and nuts etc. in any floor at any height.	Each	1,290.80 1,290.80
25	Providing and fixing two piece adjustable asbestos cement finials (coloured other than grey) without bolts and nuts etc. in any floor at any height..	Each	1,290.80 1,290.80
26	Providing and fixing asbestos cement self supporting sheets (nalidar beam of dadex or its equivalent) 24 Ft. X 39-1/2 inches X 9/32 inches (7.32 M X 1003 mm X 7 mm) size in ground floor..	Each	19,640.63 19,640.63
27	Providing and fixing asbestos cement closure piece partly flat partly corrugated (for 14 corrugations) coloured other than grey without bolts and nuts etc. in ground floor.	Rft. Ru.m.	153.95 505.10
28	Providing and fixing asbestos cement corner piece 8 ft. X 12 inches (2.4 M X 305 mm) for large sections sheets without bolts and nuts etc. in ground floor.	Rft. Ru.m.	684.96 2,247.23
29	Providing and fixing asbestos cement boards 8 ft. X 3-3/4 inches (2.4 M X 95 mm) for large section without bolts and nuts etc. in ground floor..	Rft. Ru.m.	241.67 792.88
30	Providing and fixing asbestos cement barge board corner piece 8 ft. (2.4 m) (coloured other than grey) without bolts and nuts etc. in ground floor..	Rft. Ru.m.	89.59 293.94
31	Providing and fixing plain galvanized iron sheets gutter 18 inches (457 mm) girth of 18 B.W.G. complete with bolts and nuts etc. in ground floor..	Rft. Ru.m.	1,343.56 4,408.01
32	Providing and fixing plain galvanized iron sheets valley gutters 18 inches (457 mm) girth of 22 B.W.G. complete with bolts and nuts etc. in ground floor.	Rft. Ru.m.	1,223.56 4,014.31
33	Providing and fixing asbestos cement valley gutters in two feet (610 mm) length pieces and 9 inches X 6 inches (229 mm X 152 mm) size with 1/4 inch (6.4 mm) thickness in ground floor complete..	Rft. Ru.m.	1,065.56 3,495.94
34	Providing and fixing asbestos cement valley gutters 12 inches to 18 inches (305 mm to 457 mm) of size 18 inches X10X5 inches X 1/2 inch (457 mm X 254 mm X 127 mm X 13mm), 16"X10"X5"X 1/2" (406 mm X 254 mm X 127 mm X 13 mm) or 12 inches X 10 inches X 6 inches X 1/2 inch (305 mm X 254 mm X 152 mm X 13 mm) in ground floor..	Rft. Ru.m.	994.01 3,261.20
35	Providing 4" (102 mm) average thick lime concrete 1:2:4 (1 lime 2 surkhi, 4 bricks ballast) laid to slope over 1-1/2" (38 mm) thick cement concrete 1:2:4 (1 cement, 2 sand and 4 screened graded baJri) tiles 12" X 12" X 1-1/2" (305 mm X 305 mm X 38 mm) laid in 1:3 cement mortar over wooden rafters or joists etc. (Cost of rafters and joists excluded) including curing etc. complete in ground floor.	100 Sq.ft Sq.m.	16,374.21 1,762.50

ROOFING OTHER THAN R.C.C. AND CEILINGS

SUB-HEAD CODE 116

S. No.	Description	Unit	Rate in Rs.
36	Providing 4 inches average thick puddled earth laid to slope mixed with bhoosa at the rate of one seer (0.93 Kg) of bhoosa for one cubic feet (0.03 c.m.) of puddled earth over 1-1/2 inch (38 mm) thick cement concrete 1:2:4 (1 cement 2 sand and 4 screened graded bajri) tiles 12 inch X 12 inch X 1-1/2 inch (305 mm X 305 mm X 38 mm) laid in 1:3 cement mortar over any supporting material cost of supporting materials excluded) including curing etc. complete in ground floor.	100 Sq.ft	11,775.83
		Sq.m.	1,267.54
37	Providing and laying 1st class burnt clay tiles of 9" X 4-1/2" X 1-1/2" size grouted with 1:3 cement mortar over 4" thick (avg) puddled earth compacted and smooth finished to slope mixed with bhoosa at the rate of one seer of bhoosa for one cft. of puddled earth in ground floor including flush pointing on tiles works with 1:3 cement mortar and curing complete.	100 Sq.ft	15,377.75
		Sq.m.	1,655.25
38	Deduct if burnt clay tiles of size 12 inches X 12 inches X 2 inches (305 mm X 305 mm X 51 mm) are used in item Nos. 36 and 37..	100 Sq.ft	3,745.78
		Sq.m.	403.19
39	Deduct if burnt clay tiles of size (12 inches X 6 inches X 2 inches (305 mm X 152 mm X 51 mm) are used in item Nos. 36 and 37..	100 Sq.ft	4,383.82
		Sq.m.	471.87
40	Providing and fixing 1 /4 inch (6.4 mm) thick plain asbestos cement sheet ceiling on wooden frame with deodar wooden beading 2 inches X 1/2 inch (51 mmX 13 mm) of required shape fixed with screw, perforated in corners if required but excluding the cost of frame, in ground floor.	100 Sq.ft	18,611.11
		Sq.m.	2,003.28
41	Providing and fixing 1/2 inch (13 mm) thick soft board ceiling on wooden frame with deodar wood beading 2 inches X 1/2 inch (51 mm X 13 mm) of required shape fixed with screws, perforated in corners if required but excluding the cost of wooden frame, in ground floor.	100 Sq.ft	21,235.94
		Sq.m.	2,285.82
42	Providing and fixing 1/2 inch (13 mm) thick thermopore sheet ceiling on wooden frame with deodar wood beading 2 inch X 1/2 inch (51 mm X 13 mm) of required shape fixed with screws, perforated in corners if required but excluding the cost of wooden frame, in ground floor.	100 Sq.ft	10,903.22
		Sq.m.	1,173.61
43	Providing and fixing 1/2 inch (13 mm) thick thermosole ceiling on wooden frame deodar wood beading 2 inches X 1/2" (51 mm X 13 mm) of required shape fixed with screws perforated in corners if required but excluding the cost of wooden frame, in ground floor..	100 Sq.ft	7,856.77
		Sq.m.	845.69
44	Extra per 1/2 inch (13 mm) thickness of thermopore in item No. 42.	100 Sq.ft	(546.88)
		Sq.m.	(58.87)
45	Extra per 1/2 inch (13 mm) thickness of thermosole in item No. 43.	100 Sq.ft	3,281.25
		Sq.m.	353.19
46	Providing and fixing hessian cloth ceiling with wooden beading 2 inches X 1/2" (51 mm X 13 mm) fixed with screws complete in ground floor.	100 Sq.ft	10,206.25
		Sq.m.	1,098.59

ROOFING OTHER THAN R.C.C. AND CEILINGS
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S. No.	Description	Unit	Rate in Rs.
47	Providing fixing and hoisting best quality deodar wood ceiling frame of required section including providing approved anti-termite treatment etc. complete as required.	Cft. Cu.m.	11,068.07 390,865.68
48	Providing fixing and hoisting best quality pan wood ceiling frame of required section including providing approved anti-termite treatment etc. complete as required....	Cft. Cu.m.	5,833.44 206,006.36
49	Providing and laying 1:2:4 (1 lime 2 surkhi 4 brick ballast) lime concrete in haunches of jack arch roof average thickness 6" (152 mm) including form work, rodding, centering, compacting and curing etc. complete in ground floor..	100 Sq.ft Sq.m.	13,288.34 1,430.34
50	Providing and laying 1:2:4 (1 cement 2 sand 4 graded screened bajri) in cement concrete using graded screened bajri in haunches of jack arch roof average thickness 4 inches (102 mm) including form work, rodding, centering, compacting and curing etc. complete in ground floor..	100 Sq.ft Sq.m.	8,122.53 874.30
51	Extra for every additional floor above ground floor in item Nos. 1 to 8..	100 Sq.ft Sq.m.	659.38 70.97
52	Extra for every additional floor above ground floor in item Nos. 9 to 10.	100 Sq.ft Sq.m.	661.25 71.18
53	Extra for every additional floor above ground floor In item Nos.11 to 23,27 to 34..	Rft. Ru.m.	10.23 33.57
54	Extra for every additional floor above ground floor in item No.26..	Each Each	328.13 328.13
55	Extra for every additional floor above ground floor in item Nos. 35 to 37.	100 Sq.ft Sq.m.	122.50 13.19
56	Extra for every additional floor above ground floor in Item Nos. 42 to 43 and 46.	100 Sq.ft Sq.m.	154.38 16.62
57	Extra for every additional floor above ground floor in item Nos. 49 and 50.	100 Sq.ft Sq.m.	3,315.00 356.82
58	Providing and fixing pre-cast RCC slab length 3'.00 to 4'-6" and width 1'-6" to 2'-00 (914mm to 1372mm x 457mm to 610mm) made by Izhar (Pvt) Limited including setting in position and filling the joints with cement motar 1:4 etc. complete as per direction of the Engineer-in-Charge.	100 Sq.ft Sq.m.	10,629.02 1,144.10
59	Providing and fixing pre-cast RCC slab length exceeding 4'-6" (1372mm) but not exceeding 6'-6" (1981 mm) width 1'-6" to 2'-00 (457mm to 610mm) made by Izhar (Pvt) Limited including setting in position and filling the joints with cement motar 1:4 etc. complete as per direction of the Engineer-in-Charge,	100 Sq.ft Sq.m.	11,941.52 1,285.37
60	Providing and fixing pre-cast RCC slab length 3',00 to 4'-6" and width 1'-0" (914mm to 1372mm x 304mm) made by Izhar (Pvt) Limited including setting in position and filling the joints with cement motar 1:4 etc. complete as per direction of the Engineer-in-Charge.	100 Sq.ft Sq.m.	10,098.34 1,086.98

ROOFING OTHER THAN R.C.C. AND CEILINGS

SUB-HEAD CODE 116

S. No.	Description	Unit	Rate in Rs.
61	Providing and fixing pre-cast RCC slab length exceeding 4'-6" (1372mm) but not exceeding 6'-6" (1981 mm) width one foot (304mm) made by Izhar (Pvt) Limited including setting in position and filling the joints with cement motar 1:4 etc. complete as per direction of the Engineer-in-Charge.	100 Sq.ft Sq.m.	11,148.34 1,200.00
62	Providing and fixing pre-cast pre-stressed RCC girders size 4"x9" (100mm x 229mm) made by Izhar (Pvt) Limited including setting in position with cement concrete 1:2:4 at ends of girder (sides and bottom) etc, as per direction of the Engineer-in-Charge.	Rft. Ru.m.	424.02 1,391.13
63	Providing and fixing pre-cast pre-stressed RCC girders size 5" x l2" (127mm x 304mm) made by Izhar (Pvt) Limited including setting in position with cement concrete 1:2:4 at ends of girder (sides and bottom) etc, as per direction of the Engineer-in-Charge.	Rft. Ru.m.	445.59 1,461.91
64	Providing and fixing pre-cast pre-stressed RCC girders H type size 6" x 9" (150mm x 229mm) made by Izhar (Pvt) Limited including setting in position as in columns and plinth beam with all respect as per direction of the Engineer-in-Charge.	Rft. Ru.m.	510.66 1,675.38
65	Providing and laying pre-cast R.C.C planks for in fill between boundary wall columns 8' x 8" x 2" (2438 mm x 203 mm x 50 mm) size i/c setting in position as per direction of Engineer-in-charge.	Rft. Ru.m.	101.17 331.93

FLOORS

Code 117

FLOORS (S.H-117)

Brief Specification

BED CONCRETE FOR FLOORING

- Sub-base shall be laid with earth free from vegetables, and other deleterious matters etc in layers of 6". The sub-base shall be properly leveled before sand filling.
- Sand fill shall be done in layers of not more than 4" and shall be compacted in saturated state.
- Cement concrete in proportions as specified in the item of work shall be laid in one operation in a uniform layer of specified thickness. The surface of concrete bed shall be kept thoroughly wet. At the time of laying the surface, it shall be washed and scrubbed with wire brushes.
- The unit shall be in CFT.

1. CEMENT CONCRETE FLOORING

- It shall be laid in thickness as specified in the item of work over cement concrete bed or dry stone bed duly washed and scrubbed.
- Before laying surface, the base shall be divided in to panels of required sizes made by brass, asbestos, aluminium or glass strips. The top of concrete floor shall conform to the specified level of finished floor surface.
- The concrete shall be placed in position within 30 minutes of addition of water to the mix. The aggregate should not segregate from mortar and concrete shall be well rammed.
- The concrete shall be laid in alternate panels of sizes as directed by Engineer incharge.
- The surface shall be leveled with a wooden trowel. The finer stuff in the concrete, which has come to the surface with the stroking shall be quickly and carefully smoothed with steel trowel. No dry cement or mix of dry cement with sand shall be sprinkled on the surface for hardening the surface.
- Flooring shall be measured by superficial area and the unit shall be 100.Sft.

2. MARBLE (TERRAZZO) FLOORING.

- If cement of approved shade is not available. Engineer incharge may allow the contractor to make the coloured cement by mixing approved colouring matter.
- Surface of the terrazzo shall be rubbed with carborundum blocks, after 3 days of laying, beginning with coarser grade, till smooth surface is obtained.
- Finally oxalic acid powder shall be rubbed on the surface with pieces of felt and a few drops of water and a glossy finish be obtained by applying an approved floor polish.
- In walls, dados, skirting and the like, the terrazzo finish shall be given a base consisting of rendering of cement mortar (1:4) of the specified thickness.
- The top of the base shall be cross hatched, so as to provide strong bond between the base and the terrazzo finish.
- When 13mm thick terrazzo is specified, marble chips passing through 10mm and retained on 3mm screen will be used.

- Freshly placed concrete shall be protected from all defacement due to building operation and shall be kept moist by sprinkling with water for at least 10-days.

3. REINFORCED CEMENT CONCRETE FLOORS

- Reinforced cement concrete floors are used for areas where heavy loading is expected and also in workshops and ware houses etc. cement concrete 1:2:4 is used unless otherwise specified.
- The reinforcement shall be provided according to drawings and as per direction of Engineer incharge.
- Curing shall be at least for 7-days. Measurement of reinforcement shall be by weight where as that of floor will be as superficial area.

4. STONE PAVED FLOORING.

- The size and specification of stone shall be as per nomenclature of items. The edges should be truly squared.
- It shall be laid over a layer of cement sand mortar of specified thickness. The stone shall be laid as per drawing or as per direction of Engineer incharge.
- After the stones have been laid, the mortar in the joints will be raked out for a depth of about 1" and joint shall be flush pointed with cement mortar not leaner than 1:3 and as per directions of Engineer incharge.

5. DRY STONE PAVEMENTS

- The stone of approved design and shape and make shall be laid on 3" of sand bed the sand should be obtained from single source. Uniform gap is to be left between the edges as desired by the Engineer incharge. Grouting may be carried out, if mentioned in item of work.
- It shall be well watered. The measurement shall be as per superficial area.

6. MARBLE FLOORING

- Marble tile shall be of marble stone of approved origin, required shade and sizes / thickness as provided in the item of work with truly required edges by means of grading manually or mechanically.
- Laying of tiles shall be done over a pre laid bed concrete in cement mortar of proportion as specified in the item of work.
- Cement sand mortar shall be prepared in a proportion mentioned in item of work. Cement mortar shall be mixed in such a quantity which can be used within 30 minutes.
- The tiles shall be very closely jointed and in no case joints shall exceed 1/16 of an inch. The joints shall be pointed with cement of specified ratio. The tiles shall be set evenly and four corners of each tile meet flush with the adjoining 4 corners of the tiles.

7. GLAZED TILE FLOORING

- The thickness shall be as specified and tiles shall be soaked in water and brushed on under side with neat cement slurry.
- These shall be laid / fixed on cement mortar 1:4 of 13 mm thickness. Each tile shall be set individually over the floating coat. The joints shall be as close as possible and the edges should be rubbed down to get an exact size and thin joint. The joints shall then be pointed with matching cement soon after these tiles shall be washed and surface shall be dried by using a soft cloth.
- For cutting the tiles to required sizes contractor will not be entitled to claim extra for cutting and finishing the edges as approved by the Engineer incharge.

8. MOASIC TILE / CEMENT TILE FLOORING

- The tiles shall be machine machine made hydraulically compressed uniform in colour / pattern. The step tiles for risers and treads shall be of the size to suit the design of stair.
- The tiles shall be soaked for 10 to 20 minutes before use. Tiles having even hair cracks shall be rejected. Should the cracks be noticed after laying. These shall be replaced at the contractor cost and risk.
- Any claim on account of cutting the tiles where required wastage if any, will not be entertained.
- Over the bed concrete in ground floor or directly on R.C.C. slab one inch thick cement sand mortar 1:2 shall be evenly laid. Before laying tiles, floating coat consisting of liquid mixture of neat gray cement and water is poured. Each tile shall be laid individually. The joint thickness must not exceed 1/16" in thickness. The joint must be in a line running straight from room to room and room to passage. The joints shall be filled in with coloured cement grout.
- The surface shall be ground with approved type grinding machine. The tiles shall be set in level.

9. P.V.C. ASBESTOS AND RUBBER TILE FLOORING

- P.V.C. flexible tiles or Asbestos based P.V.C. tiles or plain designed rubber tiles of approved size and thickness shall have base according to the cement concrete flooring topped with ½", 1:3 cement sand mix or any other specified mix.
- The base will be allowed to dry completely and cleaned thoroughly to make it free from contamination of dust, moisture, oil or grease. The area of not exceeding 25 sq. ft. at a time shall be coated with approved adhesive material. Sufficient number of tiles for this shall be treated with adhesive material. 10 to 15 minutes shall be spent for airing the adhesive. The tiles shall be laid starting from one side of the room. The tiles shall be pressed thoroughly with appropriate means so that complete adhesion takes place. The finished surface shall be washed with soap and water after 3 days.
- The curing for 3 days shall be allowed before the loading is applied to the floors.

TUFF PAVERS

(1) Paving Stones.

a. **Sub-Base.** The sub-base for approach roads, driveways and parking lots used for low speed traffic should comprise of minimum 150 mm thick compacted hard core. For areas to be used for pedestrians only, well-compacted earth is sufficient. The sub-base may have been used by site traffic before the paving is laid. It must therefore, be inspected to make sure that it is structurally sound, free of debries or mud and that its surface level is correct. Any faults must be rectified before the laying course is spread.

b. **Laying Course.** The laying course, about 50 mm thick after vibration, consists of clean, washed sharp sand containing not more than 3% of silt and clay by weight. To achieve the best regularity in the finished surface, the sand should be uniform in both type and moisture content, spread to a smooth level without uneven compaction. To help maintain uniformity, the sand should be obtained from a single source, allowed to dry before use and sheeted over to minimize changes in moisture content.

(2) FLOORS AND WALL TILING.

c. **Screeding To Level.** Screeding is by traditional methods. On roads up to 5m wide can be done from the kerbs. For wider roads, or over large areas, temporary screed rails set to level can be used.

d. **Surcharge.** After final vibration, the INTER-LOCK PAVERS will be lower than their initial level because the laying course sand has been compacted and some has moved up into the joints between the blocks. Thus the sand has to be laid to a surcharge, the amount of which depends on the type and moisture content of the sand but is normally in the range 5 to 15 mm.

e. Surface Course.

1. Placing the first Pavers

a. The positioning of the first INTER-LOCK PAVERS demands extra care. To give the required laying pattern the pavers must be placed at the correct angle against a firm starting edge.

b. Each INTER-LOCK PAVER has to be placed very carefully so as not to disturb its neighbours, and it is not disturbed until three or four rows have been placed that the normal rapid laying rates can be achieved.

c. The order of laying must ensure that the pavers can be placed easily and in such a. way that it is never necessary to force a paver between those already laid.

2. **Laying**

a. Each INTER-LOCK PAVER must be placed firmly against its neighbors, being held slightly above the laying course so as not to disturb the sand until the pavers is in its correct place.

b. All INTER-LOCK PAVERS must be laid so that they fit closely together. If joints begin to open, the pavers should be knocked together with a wooden hammer. Care must be taken not to tilt the pavers on the leading edge of the laying face by standing or kneeling on them.

c. Paver laying is continued until enough area has been laid to make vibration worth while - say, 15 to 20 square meters. Men or light equipment can move over the pavers before they have been vibrated. At this stage an uneven surface, may be faced but this will be ironed out by the plate vibrator.

3. **Edging.**

a. Where INTER-LOCK PAVERS do not fit at the edges the spaces are filled with cut pieces but very small pieces are best chipped off with a bolster and hammer.

b. Where the gaps are small, with a dimension less than 50 mm, they can be filled with a 1:4 cement sand mortar.

4. **Vibration**

a. The INTER-LOCK PAVERS are vibrated to their final level with plate vibrator. There is no advantage in using a heavy machine; one with a plate of between 0.2 and 0.3 square meters and j a centrifugal force of approximately 1 tonne is suitable.

b The vibrator should be guided over the whole area, avoiding any unrestrained edge by about a metre. Two or three passes will normally be I needed to vibrate to the finished level.

5. **Filling The Joints.**

After the initial vibration, sand is brushed over the surface of the pavers and is vibrated into the Joints by further two or three passes of the plate vibrator. After all the joints are filled, surplus sand can be swept away. The paved area is now ready for use.

S. No.	Description	Unit	Rate in Rs.
30	Providing and laying floor of 3 inches (76 mm) thick 1:2:4 reinforced cement concrete using graded screened bajri 3/4" (19 mm) and down gauge in ground floor including form work, consolidation, finishing and curing etc. complete but excluding the cost of reinforcement..	100 Sq.ft Sq.m.	11,091.71 1,193.90
31	Providing and laying in ground floor 30 B.W.G. expanded metal 1/2 inch (13 mm) mesh as reinforcement including the cost of concrete chairs etc. complete in all types of floor..	100 Sq.ft Sq.m.	9,713.25 1,045.52
32	Providing and laying M.S. reinforcement bars including . cutting, bending, binding, wastage, overlaps (unless shown on drawing and placing in position on cement concrete precast chairs, tying with binding wire complete with cost of chairs, binding wire etc. in cement concrete floor complete.	Per Cwt. Per Kg.	12,297.26 242.06
	(4) Marble and Stone Floors.		
33	Providing and laying floor of 3/4 inch (19 mm) thick marble tiles upto 36 Sq. inch (232 sq.cm) size fine dressed on the surface without windings in ground floor and laid over 1 inch (25 mm) thick lime mortar 1:2 (one lime, two sand) setting the tiles with grey cement slurry over lime mortar, jointing & washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar.	100 Sq.ft Sq.m.	26,556.00 2,858.46
34	Providing and laying floor of 3/4 inch (19 mm) thick onyx tiles up to 36 Sq. inch (232 sq.cm) size fine dressed on the surface without windings in ground floor and laid over 1 inch (25 mm) thick lime mortar 1:2 (one lime, two sand) setting the tiles with grey cement slurry over lime mortar, Jointing and washing the tiles with slurry of white cement mixed with pigment of matching colour including curing, rubbing and polishing etc. complete, including the cost of mortar..	100 Sq.ft Sq.m.	52,472.25 5,648.06
35	Extra for using onyx tiles of size more than 36 Sq. inch (232 Sq.cm) upto maximum size of 3 Sq.ft. (0.28 Sq.m) in item No.34.	100 Sq.ft Sq.m.	31,875.00 3,430.99
36	Providing and laying floor of 3/4" inch (19 mm) thick marble tiles, more than 36 Sq. inch upto 72 Sq. inch (more than 232 Sq.cm and upto 464 Sq.cm) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime, two sand) setting the marble tile with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar.	100 Sq.ft Sq.m.	31,018.50 3,338.80

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S. No.	Description	Unit	Rate in Rs.
37	Providing and laying floor of 3/4" inch (19 mm) thick marble tiles, more than 72 Sq. inch upto 144 Sq. inch (more than 464 Sq.cm upto 928 Sq.cm) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete including the cost of mortar.	100 Sq.ft Sq.m.	39,306.00 4,230.86
38	Providing and laying floor of 3/4" inch (19 mm) thick marble tiles, more than one Sq.ft. upto 3 Sq.ft. (more than 0.093 Sq.m upto 0.28 Sq.m) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar..	100 Sq.ft Sq.m.	41,856.00 4,505.34
39	Providing and laying floor of 3/4 inch (19 mm) thick marble tiles more than 3 Sq.ft. upto 5 Sq.ft- (more than 0.28 Sq.m upto 0.46 Sq.m) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime, two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete including the cost of mortar.	100 Sq.ft Sq.m.	48,668.50 5,238.63
40	Providing and laying floor of 3/4 inch (19 mm) thick marble tiles more than 5 Sq.ft. upto 7 Sq.ft. (more than 0.46 Sq-m upto 0.65 Sq.m) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar..	100 Sq.ft Sq.m.	55,043.50 5,924.83
41	Providing and laying floor of 3/4 inch (19 mm) thick marble tiles more than 7 Sq.ft. upto 16 Sq.ft. (more than 0.65 Sq.m upto 1.48 Sq.m) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar..	100 Sq.ft Sq.m.	86,918.50 9,355.82

SUB-HEAD CODE 117

S. No.	Description	Unit	Rate in Rs.
42	Providing and laying floor of 3/4 inch (19 mm) thick Granite stone Pakistani origin upto 36 Sq. inch (232 sq.cm) size fine dressed on the surface without windings in ground floor and laid over 1 inch (25 mm) thick lime mortar 1:2 (one lime, two sand) setting the tiles with grey cement slurry over lime mortar, jointing & washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar.	100 Sq.ft Sq.m.	48,231.00 5,191.54
43	Providing and laying floor of 3/4" inch (19 mm) thick Granite stone tiles Pakistani origin more than 36 Sq. inch upto 72 Sq. inch (more than 232 Sq.cm and upto 464 Sq.cm) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime, two sand) setting the marble tile with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar.	100 Sq.ft Sq.m.	57,793.50 6,220.83
44	Providing and laying floor of 3/4" inch (19 mm) thick Granite stone Pakistani origin more than 72 Sq. inch upto 144 Sq. inch (more than 464 Sq.cm upto 928 Sq.cm) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete including the cost of mortar.	100 Sq.ft Sq.m.	64,168.50 6,907.03
45	Providing and laying floor of 3/4" inch (19 mm) thick Granite stone Pakistani origin tiles, more than one Sq.ft. upto 3 Sq.ft. (more than 0.093 Sq.m upto 0.28 Sq.m) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar..	100 Sq.ft Sq.m.	67,356.00 7,250.13
46	Providing and laying floor of 3/4 inch (19 mm) thick Granite tiles Pakistani origin more than 3 Sq.ft. upto 5 Sq.ft- (more than 0.28 Sq.m upto 0.46 Sq.m) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime, two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete including the cost of mortar.	100 Sq.ft Sq.m.	74,168.50 7,983.42

S. No.	Description	Unit	Rate in Rs.
47	Providing and laying floor of 3/4 inch (19 mm) thick Granite stone tiles Pakistani origin more than 5 Sq.ft. upto 7 Sq.ft. (more than 0.46 Sq-m upto 0.65 Sq.m) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar..	100 Sq.ft Sq.m.	99,668.50 10,728.22
48	Providing and laying floor of 3/4 inch (19 mm) thick Granite stone tiles Pakistani origin more than 7 Sq.ft. upto 16 Sq.ft. (more than 0.65 Sq.m upto 1.48 Sq.m) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar..	100 Sq.ft Sq.m.	157,043.50 16,904.01
49	Providing and laying floor of 1" inch (25 mm) thick Granite stone tiles Pakistani origin, more than 36 Sq. inch upto 72 Sq. inch (more than 232 Sq.cm and upto 464 Sq.cm) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime, two sand) setting the marble tile with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar.	100 Sq.ft Sq.m.	70,543.50 7,593.23
50	Providing and laying floor of 1" inch (25 mm) thick Granite marble tiles, Pakistani origin more than 72 Sq. inch upto 144 Sq. inch (more than 464 Sq.cm upto 928 Sq.cm) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete including the cost of mortar.	100 Sq.ft Sq.m.	76,918.50 8,279.43
51	Providing and laying floor of 1" inch (25 mm) thick Granite marble tiles of Pakistani origin, more than one Sq.ft. upto 3 Sq.ft. (more than 0.093 Sq.m upto 0.28 Sq.m) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar..	100 Sq.ft Sq.m.	83.293.50 8,965.63

S. No.	Description	Unit	Rate in Rs.
52	Providing and laying floor of 1 inch (25 mm) thick Granite stone tiles more than 3 Sq.ft. upto 5 Sq.ft- (more than 0.28 Sq.m upto 0.46 Sq.m) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime, two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete including the cost of mortar.	100 Sq.ft Sq.m.	93,293.50 10,042.02
53	Providing and laying floor of 1 inch (25 mm) thick Granite stone Pakistani origin tiles more than 5 Sq.ft. upto 7 Sq.ft. (more than 0.46 Sq m upto 0.65 Sq.m) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar..	100 Sq.ft Sq.m.	118,793.50 12,786.81
54	Providing and laying floor of 1 inch (19 mm) thick Granite stone Pakistani origin tiles more than 7 Sq.ft. upto 16 Sq.ft. (more than 0.65 Sq.m upto 1.48 Sq.m) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar..	100 Sq.ft Sq.m.	208,043.50 22,393.59
55	Providing and laying floor of 1 inch (25 mm) thick marble tiles, more than 36 Sq. inch upto 72 Sq. inch (more than 232 Sq.cm and upto 464 Sq.cm) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime, two sand) setting the marble tile with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar.	100 Sq.ft Sq.m.	35,481.00 3,819.14
56	Providing and laying floor of 1 inch (25 mm) thick marble tiles,. more than 72 Sq. inch upto 144 Sq. inch (more than 464 Sq.cm upto 928 Sq.cm) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete including the cost of mortar.	100 Sq.ft Sq.m.	41,856.00 4,505.34

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S. No.	Description	Unit	Rate in Rs.
57	Providing and laying floor of 1 inch (25 mm) thick marble tiles, more than one Sq.ft. upto 3 Sq.ft. (more than 0.093 Sq.m upto 0.28 Sq.m) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar..	100 Sq.ft Sq.m.	48,231.00 5,191.54
58	Providing and laying floor of 1 inch (25 mm) thick marble tiles more than 3 Sq.ft. upto 5 Sq.ft- (more than 0.28 Sq.m upto 0.46 Sq.m) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime, two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete including the cost of mortar.	100 Sq.ft Sq.m.	74,168.50 7,983.42
59	Providing and laying floor of 1 inch (25 mm) thick marble tiles more than 5 Sq.ft. upto 7 Sq.ft. (more than 0.46 Sq-m upto 0.65 Sq.m) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar..	100 Sq.ft Sq.m.	112,418.50 12,100.61
60	Providing and laying floor of 1 inch (25 mm) thick marble tiles more than 7 Sq.ft. upto 16 Sq.ft. (more than 0.65 Sq.m upto 1.48 Sq.m) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar..	100 Sq.ft Sq.m.	125,168.50 13,473.01
61	Providing and laying floor of 1-1/4 inches (32 mm) thick marble tiles, size upto 72 Sq. inches (464 Sq.cm.) fine dressed on the surface without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime, two sand) setting the marble tiles with grey cement slurry including curing rubbing and polishing etc. complete, including the cost of mortar.	100 Sq.ft Sq.m.	41,018.50 4,415.19
62	Providing and laying floor of 1-1/4 inches (32 mm) thick marble tiles, above 72 Sq. inches upto 144 Sq.inches (above 464 Sq.cm upto 928 Sq.cm) fine dressed on the surface without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) setting the marble tile with grey cement slurry over lime, mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar.	100 Sq.ft	48,668.50

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S. No.	Description	Unit	Rate in Rs.
		Sq.m.	5,238.63
63	Providing and laying floor of 1-1/4 inches (32 mm) thick marble tiles, above one Sq.ft. upto 3 Sq.ft. (above 0.093 Sq.m upto 0.28 Sq.m) fine dressed on the surface without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) setting the marble tiles with grey cement slurry over lime mortar, Jointing and washing, the tiles with white cement slurry including curing, rubbing and polishing etc. complete including the cost of mortar	100 Sq.ft Sq.m.	55,043.50 5,924.83
64	Providing and laying floor of 1-1/4 inches (32 mm) thick marble tiles above 3 Sq.ft. upto 5 Sq.ft. (above 0.28 Sq.m upto 0.46 Sq.m) fine dressed on the surface without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime, two sand) setting he marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc complete, including the cost of mortar....	100 Sq.ft Sq.m.	106,043.50 11,414.42
65	Providing and laying floor of 1-1/4 inch (32 mm) thick marble tiles above 5 Sq.ft. upto 7 Sq.ft. size (above 0.46 Sq.m upto 0.65 Sq.m) fine dressed on the surface without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime, two sand) setting the marble tiles with grey cement slurry over lime mortar Jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete including the cost of mortar...	100 Sq.ft Sq.m.	118,793.50 12,786.81
66	Providing and laying floor of 1-1/4 inches (32 mm) marble tiles above 7 Sq.ft. upto 16 Sq.ft. size (above 0.65 Sq.m upto 1.48 Sq.m) fine dressed on the surface without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) setting the marble tiles with grey cement slurry over lime mortar jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar..	100 Sq.ft Sq.m.	137,918.50 14,845.41
67	Providing and laying floor of 1-1/2 inches (38 mm) thick marble tiles, upto 72 Sq. inches (464 Sq. cm) fine dressed on the surface without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime, two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing rubbing and polishing etc. complete, including the cost of mortar.	100 Sq.ft Sq.m.	43,568.50 4,689.67
68	Providing and laying floor of 1-1/2 inches (38 mm) thick marble tiles above 72 Sq. inches upto 144 Sq. inches (464 Sq.cm upto 928 Sq.cm) size tine dressed on the surface without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime, two sand) setting the marble tiles with grey cement, slurry over lime mortar, jointing and washing the tile with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar	100 Sq.ft Sq.m.	58,231.00 6,267.93

SUB-HEAD CODE 117

S. No.	Description	Unit	Rate in Rs.
69	Providing and laying floor 1-1/2 inches (38 mm) thick marble tiles above one Sq.ft. upto 3 Sq.ft. (0.093 Sq.m upto 0.28 Sq.m) size fine dressed on the surface without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime, two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete including the cost of mortar.........	100 Sq.ft Sq.m.	86,918.50 9,355.82
70	Providing and laying floor of 1-1/2 inches (38 mm) thick marble tiles above 3 Sq.ft. upto 5 Sq.ft. (0.28 Sq.m upto 0.46 Sq.m) size fine dressed on the surface without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime, two sand) setting the marble tiles with grey cement, slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete including the cost of mortar.	100 Sq.ft Sq.m.	165,968.50 17,864.68
71	Providing and laying floor of 1-1/2" (38 mm) thick marble tiles above 5 Sq.ft. upto 7 Sq.ft. (0.46 Sq.m upto 0.65 Sq.m) size fine dressed on the surface without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime, two sand) setting the marble tiles with grey cement, slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar.	100 Sq.ft Sq.m.	188,918.50 20,335.00
72	Providing and laying floor of 1-1/2" (38 mm) thick marble tiles above 7 Sq.ft. upto 16 Sq.ft. (0.65 Sq.m upto 1.48 Sq.m) size fine dressed on the surface without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime, two sand) setting the marble tile with grey cement, slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete including the cost of mortar..	100 Sq.ft Sq.m.	162,143.50 17,452.96
73	Providing and fixing copper clamps or dowel bars 3/16 inch (4.8 mm) to 1/4 inch (6.4 mm) dia, and of required length and shape for securing marble tiles in stairs/steps and or in floors in any floors and in any height.	P.Lbs P.Kg	1,014.54 2,236.68
74	Extra if welding of copper is required to make clamps of required size in item No.54.	Point Point	37.50 37.50
75	Extra for making nosing of treads as per design and instructions of the Engineer-in-Charge ..	Rft P.RM	131.25 430.61
76	Extra for laying floor of any description in cement mortar 1:4 instead of lime mortar 1:2.	100 Sq.ft Sq.m.	215.50 23.20
77	Extra for stairs/steps (in treads, risers and midstair landings).	100 Sq.ft Sq.m.	7,370.63 793.37

S. No.	Description	Unit	Rate in Rs.
78	Extra for basement and mezzanine floors.	100 Sq.ft	451.25
		Sq.m.	48.57
79	Extra for first floor.	100 Sq.ft	593.75
		Sq.m.	63.91
80	Extra for every additional floor above first floor.	100 Sq.ft	403.75
		Sq.m.	43.46
	(5) **Glazed Tile Floors.**		
81	Providing and laying floor of 6mm (approx: 1/4") thick white glazed tiles 12" xl2" (304mm x 304mm) of master make (Pakistani) first grade in ground floor laid over 1" (25mm) thick cement mortar 1:2 (1 cement and 2 sand) including jointing and washing the tiles with white cement slurry and curing etc, complete.	100 Sq.ft	30,338.65
		Sq.m.	3,265.62
82	Providing and laying floor of 6mm (approx: 1/4") thick coloured glazed tiles 12" x 12" (304mm x 304mm) of master make (Pakistani) first grade in ground floor laid over 1" (25mm) thick cement mortar 1:2 (1 cement and 2 sand) including jointing and washing the tiles with white cement slurry a matching colour (by using pigment in white cement) and curing etc. complete.	100 Sq.ft	30,212.46
		Sq.m.	3,252.04
83	Providing and laying floor of 6mm (approx: 1/4") thick coloured glazed tiles more than 1 Square foot upto 2 square feet of master make or equivalent (Pakistani) first grade in ground floor laid over 1" (25mm) thick cement mortar 1:2 (1 cement and 2 sand) including jointing and washing the tiles with white cement slurry a matching colour (by using pigment in white cement) and curing etc. complete.	100 Sq.ft	42,108.61
		Sq.m.	4,532.53
84	Providing and laying floor of 6 mm (approx. 1 /4 inch) thick white glazed tiles 6" X 6" (152 mm X 152 mm) Pakistani of approved make in ground floor laid over 1 inch (25 mm) thick cement mortar base 1:2 (one cement two sand) including jointing and washing the tiles with white cement slurry including curing etc. complete.	100 Sq.ft	31,275.99
		Sq.m.	3,366.52
85	Providing and laying floor of 6 mm (approx. 1/4 inches) thick coloured glazed tiles 6" X 6" (152 mm X 152 mm) Pakistani of approved make in ground floor laid over 1 inch (25 mm) thick cement mortar base 1:2 (one cement 2 sand) including jointing and washing the tiles with white cement slurry of matching colour (by using pigment in white cement) and curing etc. complete.	100 Sq.ft	34,185.99
		Sq.m.	3,679.75
86	Extra for using tiles 4 inches X 4 inches X 5 mm thick (102 mm X 102 mm X 5 mm) in item No.84.	100 Sq.ft	24,840.38
		Sq.m.	2,673.79
87	Extra for using tiles 4 inches X 4 inches X 5 mm thick (102 mm X 102 mm X5 mm) in item No.85.	100 Sq.ft	27,466.88
		Sq.m.	2,956.51
88	Extra for basement and mezzanine floor.	100 Sq.ft	439.38
		Sq.m.	47.29

S. No.	Description	Unit	Rate in Rs.
89	Extra for first floor.	100 Sq.ft Sq.m.	593.75 63.91
90	Extra for every additional floor above first floor.	100 Sq.ft Sq.m.	313.50 33.74
	(6) Mosaic Tile Floors.		
91	Providing and laying 3/4 inch (19 mm) thick floor of mosaic marble chips tiles 8 inches X 8 inches X 3/4 inch (3/8" topping, 3/8 inch base) or 203 mm X 203 mm X 19 mm (9.5 mm topping and 9.5 mm base) in grey cement with approved marble chips in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime 2 sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with cement slurry of matching colour including grinding rubbing, polishing and curing etc. complete including the cost of mortar.	100 Sq.ft Sq.m.	20,758.62 2,234.44
92	Providing and laying 3/4 inch (19 mm) thick floor of mosaic marble chips tiles 8 inches X 8 inches X 3/4" (3/8 inch toping 3/8 inch base) or 203 mm X 203 mm X 19 mm (9.5 mm topping and 9.5 mm base) in grey cement with pigment of dark shade with approved marble chips in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with cement slurry of matching colour including grinding, rubbing, polishing and curing etc. complete, including the cost of mortar.	100 Sq.ft Sq.m.	22,340.27 2,404.68
93	Providing and laying 3/4 inch (19 mm) thick floor of mosaic marble chips tiles 8" X 8" X 3"/4" (3/8 inch topping, 3/8 inch base) or 203 mm X 203 mm X 19 mm (9.5 mm topping and 9.5 mm base) in white cement with pigment of light shade with approved marble chips in ground floor over 1 inch (25 mm) lime mortar 1:2 (1 lime 2 sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry of matching colour including grinding rubbing, polishing and curing etc. complete, including the cost of mortar.	100 Sq.ft Sq.m.	24,509.78 2,638.21
94	Providing and laying 3/4 inch (19 mm) thick floor of mosaic marble chips tiles 8" X 8" X 3/4" (1 /4 inch topping, 1/2" base) or 203 mm X 203 mm X 19 mm (6.4 mm topping and 13 mm base) in grey cement with approved marble chips in ground floor over 1 inch (25 mm) time mortar 1:2 (one lime two sand) including setting the tiles with grey cement slurry over lime mortar jointing and washing and the tiles with cement slurry of matching colour including grinding rubbing, polishing and curing etc. complete including the cost of mortar..	100 Sq.ft Sq.m.	21,031.37 2,263.80

SUB-HEAD CODE 117

S. No.	Description	Unit	Rate in Rs.
95	Providing and laying 3/4 inch (19 mm) thick floor of mosaic marble chips tiles 8" X 8" X 3/4" (1/4" topping, 1/2" base) or 203 mm X 203 mm X 19 mm (6 mm topping and 13 mm base) in grey cement with pigment of dark shade with approved chips in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime 2 sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with cement slurry of matching colour including grinding, rubbing, polishing and curing etc. complete, including the cost of mortar.	100 Sq.ft Sq.m.	22,514.42 2,423.43
96	Providing and laying floor 3/4 inches (19 mm) thick of mosaic marble chips tiles 8" X 8" X 3/4" (1/4" topping and 1/2" base) or 203 mm X 203 mm X 19 mm (6 mm topping, 13 mm base) in white cement with pigment of light shade with approved marble chips in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with cement slurry of matching colour including grinding, rubbing, polishing and curing etc complete, including the cost of mortar..	100 Sq.ft Sq.m.	23,573.75 2,537.45
97	Providing and laying 1 inch (25 mm) thick floor of mosaic marble chips tiles 12" X 12" X 1" (1/2 inch topping 1/2" base) or 305 mm X 305 mm X 25 mm (13 mm topping, 12 mm base) in grey cement with approved marble chips in ground floor over 1" (25 mm) lime mortar 1:2 (one lime two sand) including setting the tiles with grey cement slurry over lime mortar, Jointing and washing the tiles with cement slurry of matching colour including grinding, rubbing, polishing and curing etc. complete including the cost of mortar..	100 Sq.ft Sq.m.	21,944.87 2,362.12
98	Providing and laying 1 inch (25 mm) thick floor or mosaic marble chips tiles 12" X 12" X 1" (1/2 inch topping 1/2" base) or 305 mm X 305 mm X 25 mm (13 mm topping, 12 mm base) in grey cement with pigment of dark shade with approved marble chips in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with cement slurry of matching colour including grinding, rubbing, polishing and curing etc -complete including the cost of mortar.	100 Sq.ft Sq.m.	23,439.36 2,522.99
99	Providing and laying 1 inch (25 mm) thick floor of mosaic marble chips tiles 12" X 12" X 1" (1/2" topping, 1/2" base) or 305 mm X 305 mm X 25 mm (13 mm topping, 12 mm base) in white cement with pigment of light shade with approved marble chips in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime 2 sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with cement slurry of matching colour including grinding, rubbing, polishing and curing etc. complete, including the cost of mortar..	100 Sq.ft Sq.m.	24,276.97 2,613.15

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S. No.	Description	Unit	Rate in Rs.
100	Providing and laying 1-1/4 inches (32 mm) thick floor of mosaic marble chips tiles 12" X 12" X 1-1/4" (3/4 inch topping, 1/2 inch base) or 305 mm X 305 mm X 32 mm (19 mm topping, 13 mm base) in grey cement with approved marble chips in ground floor over 1 inch (25 mm) lime mortar 1 ;2 (one lime 2 sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with cement slurry of matching colour including grinding, rubbing, polishing and curing etc. complete, including the cost of mortar.	100 Sq.ft Sq.m.	22,286.45 2,398.89
101	Providing and laying 1-1/4 inches (32 mm) thick floor of mosaic marble chips tiles 12" X 12" X 1-1/4" (3/4 inch topping, 1/2 inch base or 305 mm 305 mm X 32 mm (19 mm topping, 13 mm base) in grey cement with pigment of approved dark shade marble chips in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime 2 sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with cement slurry of matching colour including grinding, rubbing, polishing and curing etc. complete, including the cost of mortar....	100 Sq.ft Sq.m.	23,271.31 2,504.90
102	Providing and laying 1-1/4 inches (32 mm) thick floor of mosaic marble chips tiles 12" X 12" X 1-1/4" (3/4 inch topping, 1/2 inch base) or 305 mm X 305 mm X 32 mm (19 topping 13 mm base) in white pigment oi approved light shade with approved marble chips in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime 2 sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with cement slurry of matching colour including grinding, rubbing, polishing and curing etc. complete, including the cost of mortar...	100 Sq.ft Sq.m.	26,756.77 2,880.07
103	Providing and laying 1-1/2 inches (38 mm) thick floor of mosaic marble tiles 16" X 16" X 1-1/2" (1 inch topping, 1/2 inch base) or 406 mm X 406 mm X 38 mm (25 mm topping, 13 mm base) in grey cement with approved marble chips in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime 2 sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with cement slurry of matching colour including grinding rubbing, polishing and curing etc. complete, including the cost of mortar..	100 Sq.ft Sq.m.	27,912.95 3,004.52
104	Providing and laying 1-1/2 inches (38 mm) thick floor of mosaic marble tiles 16" X 16" X 1-1/2" (1 inch topping, 1/2 inch base) or 406 mm X 406 mm X 38 mm (25 mm topping, 13 mm base) in grey cement with pigment of dark shade with approved marble chips in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime 2 sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with cement slurry of matching colour including grinding, rubbing, polishing and curing etc complete, including the cost of mortar.	100 Sq.ft Sq.m.	28,790.29 3,098.96

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S. No.	Description	Unit	Rate in Rs.
105	Providing and laying 1-1/2 inches (38 mm) thick floor of mosaic marble tiles 16" X 16" x 1-1/2" (1 inch topping, 1/2 inch base) or 406 mm X 406 mm X 38 mm (25 mm topping, 13 mm base) in white cement with pigment of light shade with approved marble chips in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime 2 sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with cement slurry of matching colour including grinding, rubbing, polishing and curing etc. complete, including the cost of mortar.	100 Sq.ft Sq.m.	28,551.93 3,073.30
106	Providing and laying floor 3/4 inch (19 mm) thick of mosaic tiles 8" X 8" X 3/4" (3/8 inches topping, 3/8 inch base) or 203 mm X 203 mm X 19 mm (9.5 mm topping, 9.5 mm base) in grey cement flowered or pattern with approved marble chips in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime 2 sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with cement slurry of matching colour etc. complete, including the cost of mortar..	100 Sq.ft Sq.m.	15,318.35 1,648.85
107	Providing and laying floor 1 inch (25 mm) thick of mosaic tiles 12" X 12" X 1" (1/2 inch, topping 1/2 inch base) or 305 mm X 305 mm X 25 mm (13 mm topping, 12 mm base) in grey cement with pigment of dark shade flowered or pattern with approved marble chips in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime 2 sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with cement slurry of matching colour including biding, rubbing, polishing and curing etc. complete, including the cost of mortar..	100 Sq.ft Sq.m.	20,690.90 2,227.15
108	Providing and laying floor 1-1/4 inches (32 mm) thick of mosaic tiles 16" X 16" X 1-1/4" (3/4 inch topping, 1/2" base) or 406 mm x 406 mm x 32 mm (19 mm toppig 13 mm base) in white cement with pigment of light shade flowered or pattern with approved marble chips in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) including setting the tiles with cement slurry of matching colour including grinding, rubbing, polishing and curring etc. complete including the cost of mortar..	100 Sq.ft Sq.m.	20,813.86 2,240.38
109	Providing and laying floor 1 inch (25 mm) thick of marble chips chequered or ribbed tiles 13" X 8" X 1" (1/2 inch topping, 1/2 inch base) or 330 mm X 203 mm X 25 mm (13 mm topping, 12 mm base) in grey cement with approved marble chips in ground floor over treads of stairs and steps with or without carborundum finish with proper nose set in cement mortar 1:2 (one cement two sand) jointing and washing the tiles with cement slurry including grinding, rubbing, polishing and curing etc. complete.	100 Sq.ft Sq.m.	24,420.86 2,628.64

S. No.	Description	Unit	Rate in Rs.
110	Providing and laying floor 1 inch (25 mm) thick of marble mosaic chips chequered or ribbed tiles 13" X 8" X 1" (1/2" topping, 1/2 inch base) or 330 mm X 203 mm X 25 mm (13 mm topping, 12 mm base) in grey cement with pigment of dark shade with approved marble chips in ground floor over treads of stairs and steps with or without carborundum finish with proper cement mortar 1:2 (one cement two sand) jointing and washing the tiles with cement slurry of matching colour curing etc. complete..	100 Sq.ft Sq.m.	24,604.32 2,648.38
111	Providing and laying floor 1 inch (25 mm) thick of marble mosaic chips chequred or ribbed tiles 13" X 8" X 1" (1/2 inch topping, 1 /2 inch base) or 330 mm X 203 mm 25 mm (13 mm topping, 12 mm base) in white cement with pigment of light shade with approved marble chips in ground floor over treads of stairs and steps with or without carborundum finish with proper nose set in cement mortar 1 ;2 (one cement two sand) jointing, and washing the tiles with cement slurry of matching colour including grinding, rubbing, polishing and curing etc. complete.	100 Sq.ft Sq.m.	25,944.70 2,792.66
112	Extra for mid-stairs landings of stairs/steps...	100 Sq.ft Sq.m.	1,240.00 133.47
113	Extra for flooring of any description in basement and mezzanine..	100 Sq.ft Sq.m.	439.38 47.29
114	Extra for flooring of any description in first ftoor.	100 Sq.ft Sq.m.	593.75 63.91
115	Extra for flooring of any description in every additional floor above first floor.	100 Sq.ft Sq.m.	403.75 43.46
	(7) Cement Tile Floors.		
116	Providing and laying floor 3/4 inch (19 mm) thick of cement tiles 8" X 8" X 3/4" (3/8 inch topping and 3/8 inch base) or 203 mm X 203 mm X 19 mm (9.5 mm topping and 9.5 mm base) in grey cement in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with neat cement slurry, including grinding, rubbing, polishing and curing etc. complete including the cost of mortar..	100 Sq.ft Sq.m.	18,151.40 1,953.80
117	Providing and laying floor 1 inch (25 mm) thick of cement tiles 12" X 12" X 1" (1 /2" topping and 1 /2 inch base) or 305 mm X 305 mm X 25 mm (13 mm topping, 12 mm base) in grey cement in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with neat cement slurry, polishing and curing etc. complete including the cost of mortar..	100 Sq.ft Sq.m.	19,654.80 2,115.62

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S. No.	Description	Unit	Rate in Rs.
118	Providing and laying floor 3/4 inch (19 mm) thick of cement tiles 8" X 8" X 3/4" (3/8 inch topping and 3/8 inch base) or 203 mm X 203 mm X 19 mm (9.5 mm topping 9.5 mm base) in grey cement with pigment of dark shade in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) including setting tiles with grey cement slurry over lime mortar, jointing and washing the tiles with grey cement slurry including rubbing, polishing and curing etc. complete including the cost of mortar .	100 Sq.ft Sq.m.	21,125.43 2,273.92
119	Providing and laying floor 1-1/4 inch (32 mm) thick of cement tiles 16" X 16" X 1-1/4" (1/2 inch topping and 3/4 inch base) or 406 mm X 406 mm X 32 mm (13 mm topping and 19 mm base) in grey cement tiles in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with neat cement slurry of matching colour including grinding, rubbing, polishing and curing etc. complete, including the cost of mortar...	100 Sq.ft Sq.m.	23,305.50 2,508.58
120	Proving and laying floor 1 inch (25 mm) thick of cement tiles 12" X 12" X 1" (1/2 inch toping 1/2 inch base) or 305 mm X 305 mm X 25 mm (13 mm topping 12 mm base) in grey cement with pigment of dark shade in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with grey cement slurry including grinding, rubbing, polishing and curing etc. complete including the cost of mortar .	100 Sq.ft Sq.m.	20,531.21 2,209.96
121	Providing and laying floor 1-1/4 inches (32 mm) thick of cement tiles 16" X 16" X 1-1/4" (1/2 inch topping and 3/4 inch base) or 406 mm X 406 mm X 32 mm (13 mm topping and 19 mm base) in grey cement with pigment of dark shade in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with grey cement slurry including grinding, rubbing, polishing and curing etc. complete including the cost of mortar.	100 Sq.ft Sq.m.	22,348.42 2,405.56
122	Providing and laying floor 3/4 inch (19 mm) thick of cement tiles 8" X 8" X 3/4 inches (3/8 inches topping and 3/8 inch base) or 203 mm X 203 mm X 19 mm (9.5 mm topping 9.5 mm base) in white cement with pigment of light shade in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with cement slurry of matching colour including grinding, rubbing, polishing and curing etc. complete including the cost of mortar..	100 Sq.ft Sq.m.	23,105.69 2,487.07

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S. No.	Description	Unit	Rate in Rs.
123	Providing and laying floor 1 inch (25 mm) thick of cement tiles 12" X 12" X 1" (1 /2 inch topping and 1 /2 inch base) or 305 mm X 305 mm X 25 mm (13 mm toping and 12 mm base) in white cement with pigment of light shade in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with cement slurry of matching colour including grinding, rubbing, polishing and curing etc. complete including the cost of mortar.	100 Sq.ft Sq.m.	23,854.44 2,567.67
124	Providing and laying floor 1-1/4 inches (32 mm) thick of 16" X 16" X 1-1/4" (1/2 inch topping and 3/4 inch base) or 406 mm X 406 mm X 32 mm (13 mm topping and 19 mm base) in white cement with pigment of light shade in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with neat cement slurry of matching colour including grinding, rubbing, polishing and curing etc. complete including cost of mortar.	100 Sq.ft Sq.m.	21,114.85 2,272.78
125	Providing and laying floor 3/4 inches (19 mm) thick of cement tiles 8" X 8" X 3/4" (3/8 inch topping in grey cement with flower or pattern in required colour of dark shade and 3/8 inches base in grey cement or 203 mm X 203 mm X 19 mm (9.5 mm topping in grey cement with flower or pattern in required colour of dark shade and 9.5 mm base in grey cement) in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime and two sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with neat cement slurry of matching colour including grinding, rubbing, polishing and curing etc. complete including the cost of mortar..	100 Sq.ft Sq.m.	20,931.62 2,253.06
126	Providing and laying floor 1 inch (25 mm) thick of cement tiles 12" X 12" X 1° (1/2 inch topping in grey cement with flower or pattern in required colour of dark shade, 1 /2 inch base in grey cement) or 305 mm X 305 mm X 25 mm (13 mm topping in grey cement with flower or pattern in required colour of dark shade, 12 mm base in grey cement) in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime and two sand) including setting the tiles with grey cement slurry over lime mortar, jointing and washing the tiles with neat cement slurry of matching colour including grinding rubbing, polishing and curing etc. complete including the cost of mortar.	100 Sq.ft Sq.m.	22,174.62 2,386.85

S. No.	Description	Unit	Rate in Rs.
127	Providing and laying floor 1-1/4 inches (32 mm) thick of cement tiles 16" X 16" 1-1/4" (1/2 inch topping in grey cement with flower or pattern in required colour of dark shade and 3/4 inch base in grey cement) or 406 mm X 406 mm 32 mm (13 mm topping in grey cement with flower or pattern in required colour of dark shade and 19 mm base in grey cement) in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) including setting the tiles with grey cement slurry over lime mortar jointing and washing the tiles with neat cement slurry of matching colour including grinding, rubbing, polishing and curing etc. complete, including the cost of mortar.	100 Sq.ft Sq.m.	22,157.75 2,385.04
128	Providing and laying floor 1 inch (25 mm) thick of chequered or ribbed grey cement tiles 13" X 8" X 1" (1/2 inch topping and 1/2 inch base) or 330 mm X 203 mm X 25 mm (13 mm topping and 12 mm base) in ground floor over treads of stairs and steps with or without carborundum finish with proper nose set in cement mortar 1:2 (one cement two sand) jointing and washing the tiles with cement slurry including, grinding, rubbing, polishing and curing etc, complete.	100 Sq.ft Sq.m.	24,041.48 2,587.80
129	Providing and laying floor 1 inch (25 mm) thick of chequered or ribbed grey cement tiles 13" X 8" X 1" (1/2 inch topping and 1/2 inch base) or 330 mm X 203 mm X 25 mm (13 mm topping and 12 mm base) with pigment of dark shade in ground floor over treads of stairs and steps with or without carborundum finish with proper nose set in cement mortar 1:2 (one lime and two sand) jointing, washing the tiles with cement slurry including grinding, rubbing, Polishing and curing etc. complete.	100 Sq.ft Sq.m.	21,635.14 2,328.78
130	Providing and laying floor 1 inch (25 mm) thick chequered or ribbed white cement tile 13" X 8" X 1" (1/2 inch topping and 1/2 inch base) or 330 mm X 203 mm X 25 mm (13 mm topping ground floor over treads and stairs and steps with or without carborundum finish with proper nose set in cement and 13 mm base with pigment of light shade in mortar 1:2 (one cement two sand) jointing, washing the tiles with cement slurry of matching colour including grinding, rubbing, polishing and curing etc..	100 Sq.ft Sq.m.	21,963.50 2,364.13
131	Extra for mid-star landings of stairs/steps.	100 Sq.ft Sq.m.	1,000.00 107.64
132	Extra for flooring of any description in basement and mezzanine.	100 Sq.ft Sq.m.	439.38 47.29
133	Extra for flooring of any description in first floor.	100 Sq.ft Sq.m.	593.75 63.91
134	Extra for flooring of any description in every additional floor above first floor.	100 Sq.ft Sq.m.	391.88 42.18

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S. No.	Description	Unit	Rate in Rs.
	(8) P.V.C. and Asbestos Tile Floors.		
135	Providing and laying floor of flexible polyvinyl chloride (PVC) tiles, approx. 11.8" X 11.8" X 0.099" (300 mm X 300 mm X 2-5 mm) of approved make and shade in ground floor including fixing with approved adhesive cost of sub-base concrete 1 inch (25 mm) thick 1:2:4 (one cement, two sand and 4 screened graded bajri) and its curing etc. complete as per direction of the Engineer-in-Charge.	100 Sq.ft	27,916.52
		Sq.m.	3,004.91
136	Providing and laying floor of flexible polyvinyl chloride (PVC) tiles, approx. 11.8" X 11.8" X 0.079" (300 mm X 300 mm X 2 mm) of approved make and shade in ground floor including fixing with approved adhesive, cost of sub-base concrete 1 inch (25 mm) thick 1:2:4 (one cement 2 sand and 4 screened graded bajri) and its curing etc. complete as per direction of the Engineer-in-Charge.	100 Sq.ft	26.641.52
		Sq.m.	2,867.67
137	Providing and laying floor of flexible polyvinyl chloride (PVC) tiles, approx. 11.8" X 11.8" X 0.063" (300 mm X 300 mm X 1.6 mm) of approved make and shade in ground floor including fixing with approved adhesive cost of sub-base concrete 1 inch (25 mm) thick 1:2:4 (one cement, two sand and four screened graded bajri) and its curing etc. complete as per direction of the Engineer-in-Charge...	100 Sq.ft	26,641.52
		Sq.m.	2,867.67
138	Providing and laying floor of marble colour vinyl asbestos floor tiles, approx. 11.8" X 11.8" X 0.079" (300 mm X 300 mm X 2 mm) of approved make and shade in ground floor including fixing with approved adhesive, cost of sub-base concrete 1 inch (25 mm) thick 1:2:4 (one cement, 2 sand and 4 screened graded bajri) and its curing etc. complete as per direction of the Engineer-in-Charge..	100 Sq.ft	22,797.77
		Sq.m.	2,453.93
139	Providing and laying floor of marble colour vinyl asbestos floor tiles, approx 11.8" X 11.8" X 0.063" (300 mm X 300 mm X 1.6 mm) of approved make and shade in ground floor including fixing with approved adhesive, cost of sub-base concrete 1 inch (25 mm) thick 1:2:4 (one cement two sand and 4 screened graded bajri) and its curing etc. complete as per direction of the Engineer-in-Charge..	100 Sq.ft	21,522.77
		Sq.m.	2,316.69
140	Extra for using 200 mm X 200 mm instead of 300 mm X 300 mm tiles in items No. 135 and 136..	100 Sq.ft	240.00
		Sq.m.	25.83
141	Extra for flooring of any description basement and mezzanine.	100 Sq.ft	142.50
		Sq.m.	15.34
142	Extra for flooring of any description first floor..	100 Sq.ft	296.88
		Sq.m.	31.96
143	Extra for flooring of any description in every additional floor above first floor..	100 Sq.ft	225.63
		Sq.m.	24.29

S. No.	Description	Unit	Rate in Rs.
	(9) Rubber Tile Floors.		
144	Providing and laying floor of rubber tiles 8" X 8" (203 mm X 203 mm) of approved make and shade in ground floor including fixing with approved adhesive laid over 1/2 inch(13 mm) thick base of cement mortar 1:3 (one cement three sand) including curing etc. complete including the cost of mortar.	100 Sq.ft Sq.m.	23,062.17 2,482.39
145	Providing and laying floor of rubber tiles 12" X 12" (305 mm X 305 mm) of approved make and shade in ground floor including fixing with approved adhesive laid over 1/2 inch (13 mm) thick base of cement mortar 1:3 (one cement 3 sand) including curing etc. complete including the cost of mortar..	100 Sq.ft Sq.m.	25,140.30 2,706.08
146	Providing and laying floor of rubber tiles 24' X 24" (610 mm X 610 mm) of approved make and shade in ground floor including fixing with approved adhesive laid over 1/2 inch (13 mm) thick base of cement mortar 1:3 (one cement three sand) including curing etc. complete including the cost of mortar.	100 Sq.ft Sq.m.	28,465.30 3,063.98
147	Extra for flooring of any description in basement and mezzanine floor..	100 Sq.ft Sq.m.	142.50 15.34
148	Extra for flooring of any description in ground floor.	100 Sq.ft Sq.m.	296.88 31.96
149	Extra for flooring of any description in every additional floor above first floor.	100 Sq.ft Sq.m.	225.63 24.29
	(10) Brick and Tile Floors.		
150	Providing and laying floor of first class burnt brick on edge laid and jointed in cement mortar 1:6 and pointed with cement mortar 1:3 in ground floor including curing etc. complete.	100 Sq.ft Sq.m.	17,354.02 1,867.97
151	Providing and laying floor of flat first class burnt brick laid and jointed in cement mortar 1:6 and pointed with cement mortar 1:3 in ground floor including curing etc. complete	100 Sq.ft Sq.m.	12,098.98 1,302.32
152	Providing and laying floor of first class flat burnt bricks tiles 12" X 12" X 2" (305 mm X 305 mm X 51 mm) laid and Jointed in cement mortar 1:6 and pointed with cement mortar 1:3 in ground floor including curing etc. complete.	100 Sq.ft Sq.m.	12,871.19 1,385.44
153	Providing and laying floor of flat first class burnt tiles 12" X 6" X 2" (305 mm X 152 mm X 51 mm) laid and jointed in cement mortar 1:6 and pointed with cement mortar 1:3 in ground floor including curing etc. complete..	100 Sq.ft Sq.m.	12,233.08 1,316.76
154	Providing and laying dry, herring bone design, first class burnt bricks on edge and joints filled with sand in ground floor complete..	100 Sq.ft	12,571.47

S. No.	Description	Unit	Rate in Rs.
		Sq.m.	1,353.18
155	Providing and laying dry first class burnt bricks on edge with joints filled with sand in ground floor complete...	100 Sq.ft	12,226.47
		Sq.m.	1,316.05
156	Providing and laying dry first class burnt bricks laid flat and joints filled with sand in ground floor complete....	100 Sq.ft	8,163.99
		Sq.m.	878.76
157	Deduct if flooring is laid in lime mortar 1:2 in item No.150.	100 Sq.ft	(248.21)
		Sq.m.	(26.72)
158	Deduct if flooring is laid in lime mortar 1:2 in item Nos. 151 and 152.	100 Sq.ft	(177.30)
		Sq.m.	(19.08)
159	Deduct if flooring is laid in lime mortar 1:2 in item No. 153	100 Sq.ft	(118.43)
		Sq.m.	(12.75)
160	Extra for flooring of any description in basement and mezzanine..	100 Sq.ft	296.88
		Sq.m.	31.96
161	Extra for stairs/steps (in treads, risers and mid-stair landings)..	100 Sq.ft	500.00
		Sq.m.	53.82
162	Extra for flooring of any description in first floor in item Nos.150 to 156.	100 Sq.ft	391.88
		Sq.m.	42.18
163	Extra for flooring of any description of every additional floor above first floor in item Nos. 150 to 156 .	100 Sq.ft	249.38
		Sq.m.	26.84
	(11) Wooden Floors.		
164	Providing and fixing best quality deodar wood frame of required sections laid and fixed over prelaid bed concrete including the cost of wooden gutties, nails etc. in any floor including necessary creosoting and providing approved antitermite treatment etc. complete but excluding the cost of bed concrete.	P.Cft	15,147.28
		P.Cum	534,921.81
165	Providing and fixing best quality pan wood frame of required sections laid and fixed over bed concrete including the cost of wooden gutties, nails etc. in any floor including creosoting and providing approved antitermite treatment etc- complete but excluding the cost of bed concrete.	P.Cft	7,629.58
		P.Cum	269,436.38
166	Providing and fixing with iron screws best quality imported teak wood 2 inches (51 mm) thick planeding of required width for flooring rebated or tongued and grooved on wooden frame in any floor including necessary jointing etc. complete but excluding the cost of frame..	P.Sft	3,764.75
		P.Sqm	40,523.38
167	Providing and fixing with iron screws best quality imported teak wood 1-1/2 inches (38 mm) thick planeding of required width for flooring rebated or tongues and grooved on wooden frame in any floor including necessary jointing finishing etc. complete but excluding the cost of frame..	P.Sq.ft	2,842.97
		P.Sq.m.	30,601.43

SUB-HEAD CODE 117

S. No.	Description	Unit	Rate in Rs.
168	Providing and fixing 1-1/4 inches (32 mm) thick wooden block flooring in required pattern of best quality imported teak wood cut to the required sizes in any floor including fixing on a layer of bitumen and sand mixed in the proportion of 20 lbs.(9.07 Kg) of bitumen with 3 cft. (0.085 cum) of sand 3/8 inch (9-5 mm) thick laid over screed of 3/4" thick 1:4 cement mortar including its curing the complete..	P.Sq.ft P.Sq.m.	2,714.91 29,223.04
169	Providing and fixing 1 inch (25 mm) thick wooden block flooring in required pattern in best quality imported teak wood cut to required sizes in any floor including fixing on a layer of bitumen and sand mixed in the proportion of 20 lbs. (9.07 Kg) of bitumen with 3 cft. (0.085 cum) of sand, 3/8 inch(9.5 mm) thick laid over screed of 3/4 inches (19 mm) thick 1:4 cement mortar including its curing etc, complete..	P.Sq.ft P.Sq.m.	2,616.25 28,161.09
170	Providing and fixing 1-1/4 inches (32 mm) thick wooden block flooring in required pattern in best quality shisham wood cut to required sizes in any floor including fixing on a layer of bitumen and sand mixed in the proportion of 20 lbs. (9.07 Kg) of bitumen with 3 cft. (0.085 cum) of sand 3/8 inch (9.5 mm) thick laid over screed of 3/4 inch (19 mm) thick 1:4 cement mortar including its curing etc- complete	P.Sq.ft P.Sq.m.	981.30 10,562.60
171	Providing and fixing 1 inch (25 mm) thick wooden block flooring in required pattern in best quality shisham wood cut to the required sizes in any floor including fixing on layer of bitumen and sand mixed in the proportion of 20 lbs. (9.07 Kg) of bitumen with 3 cft. (0.085 cum) of sand 3/8 inch (9.5 mm) thick laid over screed of 3/4 inch (19 mm) thick 1:4 cement mortar including its curing etc. complete.	P.Sq.ft P.Sq.m.	970.71 10,448.63
172	Providing and fixing wooden flooring in best quality imported teak wood planeds 3/4 inch (19 mm) thick rebated including fixing with brass screws on deodar wood battens 1-1/2 inches X 2 inches (38 mm X 51 mm) placed at 12 inches (305 mm) centre to centre and filling the gap between planeds and concrete base with bitumen and sand mixed in the ratio 9 lbs. (4.1 Kg) of bitumen to one cft, (0.028 cum) of sand etc. complete in any floor..	P.Sq.ft P.Sq.m.	2,112.22 22,733.84
173	Providing and fixing wooden flooring in best quality shisham wood planeds 3/4 inch (19 mm) thick rebated including fixing with brass screws on deodar wood batten 1-1/2 inches X 2 inches (38 mm X 51 mm) placed at 12 inches (305 mm) centre to centre and filling the gap between planeds and concrete base with bitumen and sand mixed in ratio 9 lbs. (4.1 Kg) of bitumen to one cft. (0.028 cum) of sand etc. complete in any floor..	P.Sq.ft P.Sq.m.	927.77 9,985.58

S. No.	Description	Unit	Rate in Rs.
174	Providing and fixing wooden flooring in best quality imported teak wood planed 1/2 inch (13 mm) thick rebated including fixing with brass screws in deodar wood batten 1-1/2 inches X 2 inches (38 mm X 51 mm) placed at 12 inches (305 mm) centre to centre and filling the gap between planeds and concrete base with bitumen and sand mixed in the ratio 9 lbs. (4.1 Kg) of bitumen to one cft. (0.028 cum) of sand etc. complete in any floor.	P.Sq.ft	1,537.08
		P.Sq.m.	16,544.99
175	Providing and fixing wooden flooring in best quality shisham wood planeds 1/2 inch (13 mm) thick rebated including fixing with brass-screws on deodar wood battens 1-1/2 inches X 2 inches (38 mm X 51 mm) placed at 12 inches (305 mm) centre to centre and filling the gap between planed and concrete base with bitumen and sand mixed in the ratio 9 lbs. (4.1 Kg) of bitumen to one cft. (0.028 cum) of sand etc. complete in any floor.	P.Sq.ft	839.44
		P.Sq.m.	9,035.65
176	Extra for stairs/steps (treads, risers and midstairs landing)..	P.Sq.ft	32.52
		P.Sq.m.	350.03
177	Providing and laying in floor C.C. 1:2:4: tuff paver 2-1/2" thick of approved design and colour pattren laid on sand cushion filling of joint with sand and warring etc. complete as per direction of Engineer Incharge. (the cost of sand cushion is included)		
	a) Average strength 7000 psi	P.Sq.ft	135.13
		P.Sq.m.	1,454.47
	b) Average strength 5000 psi	P.Sq.ft	114.50
		P.Sq.m.	1,232.47
178	Providing and laying in floor C.C. 1:2:4: tuff pavers 2" thick of approved design and colour and pattren laid on sand cushion filling of joint with sand and warring etc. complete as per direction of Engineer Incharge. (the cost of sand cushion is included).		
	a) Average strength 7000 psi	P.Sq.ft	121.38
		P.Sq.m.	1,306.47
	b) Average strength 5000 psi	P.Sq.ft	100.75
		P.Sq.ft	1,084.46
	PORCELAIN TILES		
179	Providing and laying light colour, glazed/non skid vitrified Porcelain tiles (Polished) not exceeding 1600 Sqcm each, (Pak made) on walls and floors, in any floor, laid with dry bond (stile bond) over a base of 1" thick cement mortar (1:3) including jointing to tiles with joint filler of approved quality as per direction of the Engineer incharge.	100 Sq.ft	36,016.99
		Sq.m.	387,683.29
180	Providing and laying light colour, glazed/non skid vitrified Porcelain tiles (Polished) exceeding 1600 Sqcm and upto 3600 Sqcm each, (Pak made) on walls and floors, in any floor, laid with dry bond (stile bond) over a base of 1" thick cement mortar (1:3) including jointing to tiles with joint filler of approved quality as per direction of the Engineer incharge.	100 Sq.ft	40,610.74
		Sq.m.	4,371.30

SUB-HEAD CODE 117

S. No.	Description	Unit	Rate in Rs.
181	Providing and laying light colour, glazed/non skid vitrified Porcelain tiles (Polished) exceeding 3600 Sqcm each, (Pak made) on walls and floors, in any floor, laid with dry bond (stile bond) over a base of 1" thick cement mortar (1:3) including jointing to tiles with joint filler of approved quality as per direction of the Engineer incharge.	100 Sq.ft Sq.m.	49,798.24 5,360.23
182	Providing and laying light colour, glazed/non skid vitrified Porcelain tiles (Polished) not exceeding 1600 Sqcm each, (Pak made) on walls and floors, in any floor, laid with dry bond (stile bond) over existing floor including jointing to tiles with joint filler of approved quality as per direction of the Engineer incharge.	100 Sq.ft Sq.m.	33,803.34 3,638.56
183	Providing and laying light colour, glazed/non skid vitrified Porcelain tiles (Polished) exceeding 1600 Sqcm and upto 3600 Sqcm each, (Pak made) on walls and floors, in any floor, laid with dry bond (stile bond) over existing floor including jointing to tiles with joint filler of approved quality as per direction of the Engineer incharge.	100 Sq.ft Sq.m.	38,397.09 4,133.02
184	Providing and laying light colour, glazed/non skid vitrified Porcelain tiles (Polished) exceeding 3600 Sqcm each, (Pak made) on walls and floors, in any floor, laid with dry bond (stile bond) over existing floor including jointing to tiles with joint filler of approved quality as per direction of the Engineer incharge.	100 Sq.ft Sq.m.	47,584.59 5,121.96
185	Providing & laying light/colour unglazed vitrified porcelain tiles (polished) not exceeding 1600 Sq. cm each on walls & floors foreign make (Italian or equivalent except China make) in any floor laid with dry bond (stile bond) over on 1" thick cement mortar (1:3) including jointing the tiles with joint filler of approved qualityas per direction of the Engineer incharge.	100 Sq.ft Sq.m.	49,776.93 5,357.94
186	Providing & laying light/colour unglazed vitrified porcelain tiles (polished) exceeding 1600 Sq. cm and upto 3600 Sqcm each on walls & floors foreign make (Italian or equivalent except China make) in any floor laid with dry bond (stile bond) over on 1" thick cement mortar (1:3) including jointing the tiles with joint filler of approved qualityas per direction of the Engineer incharge.	100 Sq.ft Sq.m.	70,814.43 7,622.39
187	Providing & laying light/colour unglazed vitrified porcelain tiles (polished) exceeding 3600 Sqcm each on walls & floors foreign make (Italian or equivalent except China make) in any floor laid with dry bond (stile bond) over on 1" thick cement mortar (1:3) including jointing the tiles with joint filler of approved qualityas per direction of the Engineer incharge.	100 Sq.ft Sq.m.	98,864.43 10,641.67

SUB-HEAD CODE 117

S. No.	Description	Unit	Rate in Rs.
188	Providing & laying light/colour unglazed vitrified porcelain tiles (polished) not exceeding 1600 Sq. cm each on walls & floors foreign make (Italian or equivalent except China make) in any floor laid with dry bond (stile bond) over existing floor including jointing the tiles with joint filler of approved qualityas per direction of the Engineer incharge.	100 Sq.ft Sq.m.	46,563.28 5,012.03
189	Providing & laying light/colour unglazed vitrified porcelain tiles (polished) exceeding 1600 Sq. cm and upto 3600 Sqcm each on walls & floors foreign make (Italian or equivalent except China make) in any floor laid with dry bond (stile bond) over existing floor including jointing the tiles with joint filler of approved qualityas per direction of the Engineer incharge.	100 Sq.ft Sq.m.	67,600.78 7,276.48
190	Providing & laying light/colour unglazed vitrified porcelain tiles (polished) exceeding 3600 Sqcm each on walls & floors foreign make (Italian or equivalent except China make) in any floor laid with dry bond (stile bond) over existing floor including jointing the tiles with joint filler of approved qualityas per direction of the Engineer incharge.	100 Sq.ft Sq.m.	95,650.78 10,295.75

DADO SKIRTING AND FACING

Code 118

DADO SKIRTING & FACING (S.H-118)
Brief Specification

1). DADO AND SKIRTING (PLAIN)

- Dado and Skirting shall be either plain cement mortar of specified proportions for original gray cement or white cement or coloured cement, it could also be in form of mosaic with marble chips of approved size and colours in cement or cement mixed with pigment to approved shade.
- The mix of ordinary cement and sand shall be prepared. The mix using the chips and gray cement with or without pigment or white cement or coloured cement shall be prepared.
- The plaster on the portion of the wall to be provided with skirting or dado shall be left in a rough state by brooming or by using wire brushes of approved type so as to provide a bond between this base plaster and the dado or skirting.
- The surface of the wall shall be cleaned of all foreign matter and shall be thoroughly wetted to control the suction. Only so much mix of the chips shall be mixed with water that could be utilized within 30 minutes. This mix of cement sand or cement chips shall be applied to the wall and trowelled hard to a smooth surface, proper in line both vertical and horizontal.
- Finishing of the ordinary cement sand, dado and skirting shall conform to specification for plaster whereas the finishing for the mosaic dado and skirting shall conform to the Terrazzo flooring.

2). MARBLE FACING; DADO AND SKIRTING

- The surface over which the marble tiles are required to be fixed will be clean of all dirt and dust and should be properly hacked so that the mortar sticks well to the surface. The edges of the marble tiles will be dressed true and square by rubbing them with carborandum stone or any other approved means and the same will be fixed in position and adequately secured by mean of brass / copper clamps or dowel base so that it may not fall off from the surface. Four such clamps or dowel base will be used for marble slab not exceeding 1-1/2 Sft. In area. The tiles should be fixed closely and in no case the thickness of joint shall be pointed with the cement grout of the matching colour.
- The surface should be washed with washing soda to remove any dirt and dust. The solution of oxalic acid (1:10) or best available solution in the market as approved by Engineer incharge should then be applied on the surface of the tiles using felt or an old blanket. After the surface has dried it should be wax polished using approved bees-wax and finished to glossy surface.

3). STONE FACING, DADO AND SKIRTING

Stone facing shall be of the following types:

a). Ashlar facing;
b). Coarse rubble facing;
c). Un-coarse rubble facing; and
d). Random rubble stone facing.

The appearance and patterns of each of the above mentioned type shall conform to the general requirement of these types mentioned in Chapter for Stone Masonry.

- The Stone shall be prepared as required in specification. The stone facing of approved type and the thickness of the stone as specified in the item of work shall be fixed to the walls using 1:6 cement mortar unless otherwise specified. The Ashlar face stones shall be carefully prepared and may vary between 3" to 4" thickness as specified. The surface to receive shall be well wetted and the masonry to which the facing is to be provided would have approved metalled cramps or iron lugs already fixed during the masonry work. The facing shall be laid in line and plumb.
- The facing shall be cured for a minimum period of 7 days by spreading water to keep it constantly wet. If required in the item of work the stone facing shall be finished by providing 2 coats of double boiled linseed oil followed by one coat of transparent varnish or by a material mentioned in item of work.

4). GLAZED TILE. DADO AND SKIRTING

Material shall conform to Specification for glazed tile flooring.

- The surface of the walls shall be clean of all dirt and dust. The tiles shall be covered on under-side with a cement slurry of creamy consistence 24 hours before fixing them in position. The tiles will be laid flat against the walls surface true to line and plumb, and pressed with light strokes of wooden mallet. The joints shall be very thin. The joints will be pointed with cement paste of matching colour. Soon after this, the tiles shall be washed, and the surface shall then be dried.

5). CEMENT CONCRETE AND MOSAIC TILE WALLING

- The surface of the walls shall be cleaned of all dirt and dust. The tiles will be covered with a paste of neat cement on the back and will be laid flat against the wall surface true to the line and plumb and pressed with light stroke of wooden mallet. The joints shall be very thin and will be pointed with cement paste of the matching colour.
- The surface of the tile shall be rubbed with carborundum stone.
- Two or 3 weeks after the tiles have been fixed these shall be cleaned of dirt and dust by rubbing gently with pumice stone using sufficient water. If the tiles become dirty for any reason whatsoever these shall be washed with washing soda.
- Where mosaic tiles are used, 3 days after cleaning the tiles as specified above, they will be rubbed with Oxalic Acid (1 : 10 solution) by means of felt as approved by the Engineer-in-charge.

6). PVC ASBESTOS AND RUBBER TILE. DADO AND SKIRTING

- The tile shall be fixed to the base plaster after it has thoroughly dried. The adhesive shall be applied at the recommended rate of spread and tiles fixed from bottom to top, continuously pressed. After the whole length of wall has been laid, the surface shall be pressed over the whole area from top to bottom and vice versa in successive operation.

7). BRICK TILE FACING

- Brick facing shall consist of the tiles of 9" x 4-1/2" x 1-1-/2" or 2" laid in 1:4 cement mortar unless otherwise specified.

- Wherever the brick tile facing is to be provided, wall ties of approved design and at approved distances shall have been provided in the masonry wall. Laying of brick tile facing shall conform generally to the laying of brick masonry
- The joints shall be, deep struck either in ordinary cement or a mortar to which a matching pigment has been added.
- RATE: Rate shall cover all the requirements of the work as included in the nomenclature of schedule of items of the contract and as specified in this chapter and included all labour and material, form-work, scaffolding tools and plants etc. excluding the cost of reinforcement which shall be paid separately.

PAKISTAN PUBLIC WORKS DEPARTMENT

DADO AND SKIRTING AND FACING

SUB-HEAD CODE 118

S. No.	Description	Unit	Rate in Rs.
	(A) PLAIN COLOURED AND MOSAIC (CAST IN SITU)		
1	Providing and laying dado and skirting with 3/4 inch (19 mm) thick cement plaster 1:3 in ground floor including finishing smooth with a floating coat of neat cement, rounding corners and curing etc. complete.	100 Sq.ft. Sq.m	7,274.72 783.04
2	Providing and laying dado and skirting with 1/2 inch (13 mm) thick cement plaster 1:3 in ground floor including finishing smooth with a floating coat of neat cement, rounding corners and curing etc. complete..	100 Sq.ft. Sq.m	6,170.64 664.20
3	Extra on item Nos. 1 and 2 if topping not less than 1/16 inch (1.6 mm) thick of approved dark colour and shade by using pigment in grey cement is required.	100 Sq.ft. Sq.m	1,666.38 179.37
4	Providing and laying dado and skirting etc. 7/8 inch (22 mm) thick consisting of 3/8 inch (9.5 mm) thick topping 1:2 (one grey cement 2 marble chips 0 to 4 No.) in ground floor over 1/2 inch (13 mm) thick cement mortar base 1:4 with grinding, rubbing, polishing and curing etc. complete.	100 Sq.ft. Sq.m	15,635.59 1,683.00
5	Extra if 1/2 inch (13 mm) thick topping is used in item No.4.	100 Sq.ft. Sq.m	953.00 102.58
6	Extra if white cement is required for every 1/8 inch (3.2 mm) terrazzo thickness in item No.4..	100 Sq.ft. Sq.m	547.50 58.93
7	Extra for colouring material for every 1/8 (3.2 mm) terrazzo thickness in item No.4.	100 Sq.ft. Sq.m	1,998.75 215.14
8	Providing and laying dado and skirting etc. 3/4 inch (19 mm) thick consisting of 1/4 inch (6.4 mm) thick white cement plaster 1:3 (one white cement three marble powder) as topping in ground floor over 1/2 inch (13 mm) thick cement mortar base 1:4 including finishing, smooth and curing etc. complete.	100 Sq.ft. Sq.m	10,637.83 1,145.05
9	Providing and laying stone-lithic dado and skirting etc. 7/8 inch (22 mm) thick consisting of 3/8 inch (9.5 mm) thick topping 1:3 (1 grey cement and 3 hard crushed stone) using equal parts of 1/8 inch (3.2 mm) and 1/4 inch (6.4 mm) screenings without sand over 1/2 inch (13 mm) thick cement mortar base 1:4 in ground floor including curing, rubbing with carborundum stone etc. complete as directed by the Engineer-in-Charge.	100 Sq.ft. Sq.m	15,298.01 1,646.66
10	Extra if 1/2 inch (13 mm) thick topping is provided in item No.9 of this S-H.	100 Sq.ft. Sq.m	633.33 68.17
11	Extra for dado and skirting of any description for basement and mezzanine floors over item No. 1 to 10 of this S.H..	100 Sq.ft. Sq.m	593.75 63.91
12	Extra for dado and skirting of any description in first floor over item No. 1 to 10 of this S.H..	100 Sq.ft. Sq.m	736.25 79.25
13	Extra for dado and skirting of any description for every additional floor above first floor over item No. 1 to 10 of this S.H..	100 Sq.ft. Sq.m	593.75 63.91

DADO AND SKIRTING AND FACING

SUB-HEAD CODE 118

S. No.	Description	Unit	Rate in Rs.
	(B) MARBLE AND STONE DADO. SKIRTING AND FACING		
14	Providing and fixing 3/8 inch (9.5 mm) thick white marble tiles up to 36 Sq. inches (232 Sq.cm) size fine dressed on the surface without windings in dado and skirting and facing etc. in ground floor over 1/2 inch (13 mm) thick base of cement mortar 1:3 setting of tiles in slurry of grey cement over mortar base including filling the joints and washing the tiles with white cement slurry curing, finishing, cleaning and polishing etc. in internal work complete...	100 Sq.ft. Sq.m	26,312.00 2,832.20
15	Providing and fixing 3/8 inch (9-5 mm) thick white marble tiles above 36 Sq. inches upto 144 Sq. inches (232 Sq.cm upto 928 Sq.cm) size fine dressed on the surface without windings in dado and skirting and facing etc. in ground floor over 1/2 inch (13 mm) thick base of cement mortar 1:3 setting of tiles in slurry of grey cement over mortar base including filling the joints and washing the tiles with white cement slurry curing, finishing, cleaning and polishing etc. in internal work complete..	100 Sq.ft. Sq.m	28,224.50 3,038.06
16	Providing and fixing 3/8 inch (9.5 mm) thick white marble tiles above 144 Sq. inches (928 Sq.cm) size fine dressed on the surface without windings in dado and skirting and facing etc. in ground floor over 1/2 inch (13 mm) thick base of cement mortar 1:3 setting of tiles in slurry of grey cement over mortar base including filling the joints and washing the tiles with white cement slurry curing, finishing, cleaning and polishing etc. in internal work complete..	100 Sq.ft. Sq.m	30,137.00 3,243.92
17	Providing and fixing 3/8 inches (9.5 mm) thick onyx tiles upto 36 Sq. inches (232 Sq.cm) size fine dressed on the surface without windings in dado skirting and facing in ground floor over 1/2 inch (13 mm) thick base of cement mortar 1:3 setting of tiles in slurry of grey cement over mortar base including filling the joints and washing the tiles with cement slurry of matching colour (by using white cement mixed with pigment) curing, finishing, cleaning and polishing etc. in internal work complete.	100 Sq.ft. Sq.m	43,140.12 4,643.56
18	Providing and fixing 3/8 inches (9.5 mm) thick onyx tiles above 36 Sq. inches upto 144 Sq. inches (232 Sq.cm upto 928 Sq.cm) size fine dressed on the surface without windings in dado skirting and facing in ground floor over 1/2 inch 13 mm) thick base of cement mortar 1:3 setting of tiles in slurry of grey cement over mortar base including filling the joints and washing the tiles with cement slurry of matching colour (by using white cement mixed with pigment) curing, finishing, cleaning and polishing etc. in internal work complete.	100 Sq.ft. Sq.m	55,890.12 6,015.96
19	Providing and fixing 3/8 inches (9.5 mm) thick onyx tiles above 144 Sq. inches (928 Sq.cm) fine dressed on the surface without windings in dado skirting and facing in ground floor over 1/2 inches (13 mm) thick base of cement mortar 1:3 setting of tiles in slurry of grey cement over martar base including filling the joints and washing the tiles with cement slurry of macthing colour (by using white cement mixed with pigment) curing, finishing, cleaning and polishing etc. in internal work complete..	100 Sq.ft. Sq.m	62,265.12 6,702.16
20	Extra for every additional 1/8 inches (3.2 mm) thickness upto 3/4 inches (19 mm) thick in item No.14 upto 36 Sq.inches (232 Sq.cm) size.	100 Sq.ft. Sq.m	425.00 45.75

DADO AND SKIRTING AND FACING

SUB-HEAD CODE 118

S. No.	Description	Unit	Rate in Rs.
21	Extra for every additional 1/8 inches (3.2 mm) thickness upto 3/4 inches (19 mm) thick in item No. 15, above 36 Sq. inches upto 144 Sq. inches (232 upto 928 Sq.cm) size.	100 Sq.ft. Sq.m	4,887.50 526.09
22	Extra for every additional 1/8 inches (3.2 mm) thickness upto 3/4 inches (19 mm) thick in item No,16 above 144 Sq. inches (928 Sq.cm) size..	100 Sq.ft. Sq.m	4,250.00 457.47
23	Extra for every additional 1/8 inches (3.2 mm) thickness upto 3/4 inches (19 mm) thick in item No. 17 upto 36 Sq. inches (232 Sq.cm) size.	100 Sq.ft. Sq.m	2,125.00 228.73
24	Extra for every additional 1/8 inches (3.2 mm) thickness upto 3/4 inches (19 mm) thick in item No. 18 above 36 Sq. inches upto 144 Sq. inches (232 Sq.cm upto 928 Sq.cm) size.	100 Sq.ft. Sq.m	8,500.00 914.93
25	Extra for every additional 1/8 inches (3.2 mm) thickness upto 3/4 inches (19 mm) thick in item No. 19 above 144 Sq. inches (928 Sq-cm) size.	100 Sq.ft. Sq.m	4,250.00 457.47
26	Deduct for using cement mortar 1:4 instead of 1:3 in item Nos. 14, to 19.	100 Sq.ft. Sq.m	312.52 33.64
27	Extra for dado and skirting of any description in basement and mezzanine floors in item Nos. 14, to 19. of this S.H..	100 Sq.ft. Sq.m	593.75 63.91
28	Extra for dado and skirting of any description if any additional floor above first floor over item Nos. 14, to 19 of this S.H. .	100 Sq.ft. Sq.m	890.63 95.87
29	Extra for dado and skirting of any description if any additional floor above first floor over item Nos. 14, to 19 of this S.H..	100 Sq.ft. Sq.m	748.13 80.53
30	Extra for every 10 feet (3.05 m) height or part thereof in external facing in item No. 14, to 19 of this S.H. above ground level.	100 Sq.ft. Sq.m	3,175.00 341.75
31	Providing and laying ashlar, rough tooled or bastard ashlar or block in courses stone facing upto 4 inches (102 mm) thick in cement mortar 1:3 upto a height of 10 feet (3.05 m) including curing etc. in external work complete	100 Sq.ft. Sq.m	26,248.48 2,825.36
32	Providing and laying ashlar fine stone facing upto 3 inches (76 mm) thick in cement mortar 1:3 upto a height of 10 feet (3.05 m) including curing etc. in external work, complete.	100 Sq.ft. Sq.m	28,234.53 3,039.14
33	Providing and laying coursed rubble stone facing up to 4 inches (102 mm) thick in cement mortar 1:3 upto a height of 10 feet (3.05 m) including curing etc. in external work complete..	100 Sq.ft. Sq.m	11,351.39 1,221.85
34	Providing and laying un-coursed rubble stone facing upto 4 inches (102 mm) thick in cement mortar 1:3 upto a height of 10 feet (3.05 m) including curing etc- in external work, complete.	100 Sq.ft. Sq.m	7,784.91 837.96
35	Providing and laying random rubble stone facing upto 4 inches (102 mm) thick in cement mortar 1:3 upto a height of 10 feet (3.05 m) including curing etc. in external work complete.	100 Sq.ft. Sq.m	11,487.47 1,236.50
36	Extra for every additional 10 feet (3.05 m) height or part there of in external facing in item Nos. 31 to 35.	100 Sq.ft. Sq.m	2,163.75 232.90

DADO AND SKIRTING AND FACING

SUB-HEAD CODE 118

S. No.	Description	Unit	Rate in Rs.
37	Extra for providing and fixing iron lugs of required length and shape for securing stone facing with the wall surface of all kinds in any floor including the cost of making holes in the wall and grouting with cement mortar 1:2 complete..	lbs. kg	458.70 1,011.25
38	Providing and fixing copper clamps or dowel bars 3/16 inch to 1/4 inch (6.4 mm) dia and of required length and shape for securing marble wall lining on any surface in any floor including the cost of drilling holes in marble tiles and wall and grouting with cement mortar 1:2 complete...	lbs. kg	1,200.49 2,646.62
39	Extra over item No. 38 if welding of copper wire is required to make clamps of required angles and shape.	P.Point	12.50 12.50
	(C) **GLAZED TILE DADO AND SKIRTING**		
40	Providing and fixing 1/4 inches or 6.4 mm (approx.) thick approved Pakistani make white / coloured glazed tiles upto 1.5 square feet size in dado and skirting in ground floor, over 1/2 inch (13 mm) thick base of cement mortar 1:3 setting of tiles in slurry of grey cement over mortar base including filling the joints and washing the tile with white cement slurry curing and cleaning etc. complete .	100 Sq.ft. Sq.m	27,722.10 2,983.98
41	Providing and fixing 1/4 inch or 6.4 mm (approx.) thick approved Pakistani make white / coloured glazed tiles from 1.5 Sq.ft to 3 Sft size in dado and skirting in ground floor over 1/2" (13 mm) thick base of cement mortar 1:3 setting of tiles in slurry of grey cement over mortar base, including filling the joints and washing the tiles with white cement slurry curing and cleaning etc, complete.	100 Sq.ft. Sq.m	31,498.72 3,390.49
42	Providing and fixing 1/4 inch or 6.4 mm (approx.) thick approved Pakistani make white / coloured glazed tiles 6" X 6" (152 mm X 152 mm) size in dado and skirting in ground floor, over 1/2 inch (13 mm) thick base of cement mortar 1:3 setting of tiles in slurry of grey cement over mortar base, including filling joints and washing the tiles with cement slurry of matching colour, curing and cleaning etc. complete.	100 Sq.ft. Sq.m	31,393.02 3,379.11
43	Providing and fixing 1/4 inch or 6.4 mm (approx.) thick approved Pakistani make white / coloured glazed tiles 4" X 4" (102 mm X 102 mm) size in dado and skirting in ground floor, over 1/2 inch (13 mm) thick base of cement mortar 1:3 setting of tiles in slurry of grey cement over mortar base, including filling joints and washing the tiles with cement slurry of matching colour, curing and cleaning etc. complete.	100 Sq.ft. Sq.m	58,797.72 6,328.93
44	Extra on item No. 42 if coloured glazed corners, bends and angles size 6" X 6" (152 mm X 152 mm) are used..	100 Sq.ft. Sq.m	25,614.65 2,757.14
45	Extra on item No. 43 if colours glazed corners, bends and angles size 4" X 4" (102 mm X 102 mm) are used.	100 Sq.ft. Sq.m	16,411.34 1,766.50
46	Providing and fixing 1/4"(6mm approx.) thick of Pakistani make first grade white glazed tiles upto 144 Sq.inch size in dado and skirting in ground floor over 1/2" (13mm) thick base of cement mortar 1:3 setting of tiles in slurry of grey cement over mortar base including filling the joint with white cement and washing the tile, curing and cleaning etc. complete.	100 Sft. Sq.m	25,438.50 2,738.18

DADO AND SKIRTING AND FACING

SUB-HEAD CODE 118

S. No.	Description	Unit	Rate in Rs.
47	Providing and fixing 1/4"(6mm approx.) thick of Pakistani make first grade coloured glazed tiles upto 144 Sq.inch size in dado and skirting in ground floor over 1/2" (13mm) thick base of cement mortar 1:3 setting of tiles in slurry of grey cement over mortar base including filling the joint with white cement slurry to matching the colour and washing the tile, curing and cleaning etc. complete	100 Sft.	26,546.93
		Sq.m	2,857.48
48	Extra for dado and skirting of any description in basement and mezzanine floors.	100 Sft.	608.13
		Sq.m	65.46
49	Extra for dado and skirting of any description in first floor.	100 Sft.	762.50
		Sq.m	82.07
50	Extra for dado and skirting of any description in every additional floor above first floor.	100 Sq.ft.	572.50
		Sq.m	61.62
	(D) MARBLE MOSAIC TILE DADO AND SKIRTING		
51	Providing and fixing marble mosaic tiles 6" X 6" X 3/4" (152 mm X 152 mm X 19 mm) in grey cement with chips No. 0 to 4 in dado and skirting of approved design and shade over 1/2 inch (13 mm) thick base of cement mortar 1:3 in ground floor setting of tiles in slurry of grey cement over mortar base including filling of joints and washing the tiles with cement slurry of matching colour, curing, grinding rubbing and polishing etc. complete.	100 Sq.ft.	22,216.69
		Sq.m	2,391.38
52	Providing and fixing marble mosaic tiles 6" X 6" X 3/4" (152 mm X 152 mm X 19 mm) with chips No. 0 to 4 in dado and skirting of approved design in dark shade over 1/2 inch (13 mm) thick base of cement mortar 1:3 in ground floor setting of tiles in slurry of grey cement over mortar base, cost of filling of joints and washing the tiles with cement slurry of matching colour, curing, grinding, rubbing and polishing etc. complete.	100 Sq.ft.	23,413.24
		Sq.m	2,520.18
53	Providing and fixing marble mosaic tile 6" X 6" X 3/4" (152 mm X 152 X 19 mm) with chips No. 0 to 4 in dado and skirting of approved design in light shade over 1 /2 inch (13 mm) thick base of cement mortar 1:3 in ground floor setting of tiles in slurry of grey cement over mortar base including filling of joints and washing the tiles with cement slurry of matching colour curing, grinding, rubbing and polishing etc. complete.	100 Sq.ft.	26,360.68
		Sq.m	2,837.44
54	Providing and fixing marble mosaic tiles 6" X 6" X 3/4" (152 mm X 152 mm X 19 mm) with chips No.O to 4 in dado and skirting flowered or pattern of approved design and shade over 1/2" (13 mm) thick base of cement mortar 1:3 in ground floor setting of tiles in slurry of grey cement over mortar base including filling of joints and washing the tiles with cement slurry of matching colour complete with curing, grinding, rubbing and polishing etc. complete.	100 Sq.ft.	27,686.85
		Sq.m	2,980.18
55	Extra for using tiles 8" X 6" (203 mm X 152 mm) instead of 6" X 6" (152 mm X 152 mm)	100 Sq.ft.	345.15
		Sq.m	37.15
56	Extra for using tiles 12" X 6" (305 mm X 152 mm) instead of 6" X 6" (152 mm X 152 mm)	100 Sq.ft.	1,121.74
		Sq.m	120.74
57	Extra for dado and skirting of any description in basement and mezzanine floors	100 Sq.ft.	593.75
		Sq.m	63.91
58	Extra for dado and skirting of any description in first floor	100 Sq.ft.	890.63
		Sq.m	95.87

DADO AND SKIRTING AND FACING

SUB-HEAD CODE 118

S. No.	Description	Unit	Rate in Rs.
59	Extra for dado and skirting of any description in every additional floor above first floor	100 Sq.ft. Sq.m	748.13 80.53
	(E) CEMENT TILE DADO AND SKIRTING		
60	Providing and fixing cement tiles 6" X 6" X 3/4" (152 mm X 152 mm X 19 mm) in dado and skirting in grey colour over 1/2 inch (13 mm) thick base in cement mortar 1:3 in ground floor setting of tiles in slurry of grey cement over mortar base, including filling joints and washing the tiles with cement slurry, curing, grinding, rubbing and polishing etc. complete..	100 Sq.ft. Sq.m	22,968.07 2,472.26
61	Providing and fixing cement tiles 6" X 6" X 3/4" (152 mm X 152 mm x 19 mm) in dado and skirting in approved dark shade over 1/2 inch (13 mm) thick base in cement mortar 1:3 in ground floor setting of tiles in slurry of grey cement over mortar base, including filling of joints and washing the tiles with cement slurry of the matching colour curing, grinding, rubbing and polishing etc. complete.	100 Sq.ft. Sq.m	19,394.98 2,087.66
62	Providing and fixing cement tiles 6" X 6" X 3/4" (152 mm X 152 mm X 19 mm) in dado and skirting in approved light shade over 1/2 inch (13 mm) thick base of cement mortar 1:3 in ground floor setting of tiles in slurry of grey cement over mortar base, including filling of joints and washing the tiles with cement slurry of matching colour, curing, grinding, rubbing and polishing etc. complete...	100 Sq.ft. Sq.m	25,785.16 2,775.49
63	Providing and fixing cement tiles 6" X 6" X 3/4" (152 mm X 152 mm X 19 mm) in dado and skirting in flowered or other pattern of approved design and shade over 1/2 inch (13 mm) thick base cement mortar 1:3 in ground floor setting of tiles in slurry of grey cement over mortar base, including filling of joints and washing the tiles with cement slurry of matching colour curing, grinding, rubbing and polishing etc. complete.	100 Sq.ft. Sq.m	20,367.95 2,192.39
64	Extra for using tiles 8" X 6" (203 mm X 152 mm) instead of 6" X 6" (152 mm X 152 mm)	100 Sq.ft. Sq.m	828.51 89.18
65	Extra for using tiles 12" X 6" (305 mm X 152 mm) instead of 6" X 6" (152 mm X 152 mm).	100 Sq.ft. Sq.m	828.51 89.18
66	Extra for dado and skirting of any description in basement and mezzanine floors.	100 Sq.ft. Sq.m	439.38 47.29
67	Extra for dado and skirting of any description in first floor.	100 Sq.ft. Sq.m	593.75 63.91
68	Extra for dado and skirting of any description in every additional floor above first floor.	100 Sq.ft. Sq.m	403.75 43.46

DADO AND SKIRTING AND FACING
SUB-HEAD CODE 118

S. No.	Description	Unit	Rate in Rs.
	(F) **POLY VINYLE CHLORIDE (PVC) AND ASBESTOS TILE. THERMOPORE ETC. DADO AND SKIRTING**		
69	Providing and laying poly vinyle chloride (PVC) tiles 20 cm X 20 cm X 1.6 mm in dado and skirting of approved make and shade in ground floor including fixing with approved adhesive etc. complete including 1/2" (13 mm) thick base of cement plaster 1:3 finishing and cleaning etc, complete.	100 Sq.ft. Sq.m	26,239.67 2,824.41
70	Providing and laying marble colour vinyle asbestos tiles 20 cm X 20 cm X 1.6 mm in dado and skirting of approved make and shade in ground floor including 1/2 inch (13 mm) thick base of cement plaster 1:3 finishing and cleaning etc. complete..	100 Sq.ft. Sq.m	27,739.67 2,985.87
71	Providing and fixing 1/2 inch (13 mm) thick thermopore sheets or its equivalent standard in dado and skirting of approved shade and size in ground floor including fixing with brass screws over wooden frame but excluding the cost of wooden frame complete.	100 Sq.ft. Sq.m	5,648.30 607.98
72.	Providing and laying poly vinyle chloride (PVC) skirting in pieces of required length and height 2 mm thick with approved adhesive complete in all floor.	100 Sq.ft. Sq.m	39,921.62 4,297.12
73	Extra for using 30 cm X 30 cm X 1.6 mm instead of 20 cm ;X 20 cm X 1.6 mm item No.69 & 70	100 Sq.ft. Sq.m	- -
74	Extra for every additional 1/2 inch (13 mm) item No.71	100 Sq.ft. Sq.m	1,509.90 162.52
75	Extra for dado and skirting of any description in basement and mezzanine floors.	100 Sq.ft. Sq.m	1,513.13 162.87
76	Extra for dado and skirting of any description in first floor .	100 Sq.ft. Sq.m	296.88 31.96
77	Extra for dado and skirting of any description for every additional floor above first floor.	100 Sq.ft. Sq.m	213.75 23.01
	(G) **RUBBER TILE DADO AND SKIRTING**		
78	Providing and laying rubber tiles 8" X 8" X 1/2" (203 mm X 203 mm x 13 mm) in dado and skirting of approved make and shade in ground floor. fixing with approved adhesive including 1/2 inch (13 mm) thick base of cement plaster 1:3 finishing and cleaning etc. complete..	100 Sq.ft. Sq.m	26,412.38 2,843.00
79	Providing and laying rubber tiles 12"X12"X 1/2" (305 mm X 305 mm X 13 mm) in dado and skirting of approved make and shade in ground floor, fixing with approved adhesive including 1/2 inch (13 mm) thick base of cement plaster 1:3 including finishing and cleaning etc. complete	100 Sq.ft. Sq.m	28,529.88 3,070.93
80	Providing and laying rubber tile 24" X 24" X 1/2" (610 mm X 610 mm X 13 mm) in dado and skirting of approved make and shade in ground floor, fixing with approved adhesive including 1/2 inch (13 mm) thick base of cement plaster 1:3 including finishing and cleaning etc. complete	100 Sq.ft. Sq.m	33,076.75 3,560.35
81	Extra for dado and skirting of any description in basement and mezzanine floors.	100 Sq.ft. Sq.m	142.50 15.34

DADO AND SKIRTING AND FACING

SUB-HEAD CODE 118

S. No.	Description	Unit	Rate in Rs.
82	Extra for dado and skirting of any description in first floor.	100 Sq.ft. Sq.m	296.88 31.96
83	Extra for dado and skirting of any description in every additional floor above first floor.	100 Sq.ft. Sq.m	201.88 21.73
	(H) FACING/FINISHING		
84	Providing and fixing machine made brick tile facing (laid flat in courses) in cement mortar 1:3 cement pointed in deep cut grooves and in pattern as per direction of the Engineer-in-Charge including rubbing, curing etc. upto 10 feet (3.05 m) height complete..	100 Sq.ft. Sq.m	32,570.17 3,505.82
85	Providing and fixing 10mm thick First grade Pakistani glazed tiles of National make on facing of approved size colour/shade on walls, columns and pillers etc in ground floor over 1/2" (13mm) thick base of cement motar 1:3 setting of tiles in slurry of grey cement over mortar base, making the groves and washing the tiles curing and cleaning etc. complete as per direction of the engineer-in-cnarge.	100 Sft. Sq.m	38,637.70 4,158.92
86	Providing and fixing 10mm thick first grade Pakistani glazed tiles of National on facing of approved size colour/shade on walls, columns and pillers etc in ground floor over 1/2" (13mm) thick base of cement motar 1:3 setting of tiles in slurry of grey cement over mortar base, including filling the joint and washing the tiles with cement slurry of matching colour, (by using white cement mixed with pigment) curing and cleaning etc. complete as per direction of the engineer-in-charge.	100 Sft. Sq.m	39,374.43 4,238.37
87	Providing & Fixing Chakwal stone facing (laid flat in courses) in cement mortar 1:3 cement pointed in deep cut grooves and in any pattern in any colour/shades as per direction of the engineer-in-charge including the cost of rubbing, curing etc complete in any height and any floor.	% Sft Sqm	22,942.86 2,469.63
88	Providing & Fixing Machine made Guttca brick tiles facing 1-1/2" to 2" thick in cement marter 1:3 cement pointed in deep cut grooves and in any pattern as per direction of the Engineer including in any floor in any hight.	% Sft Sqm	29,713.48 3,198.44
89	Providing & laying wall finish coat of Acrylic based Marble chips coating (mesh-16 large) 1.00 mm to 2.00 mm thick in any color one extra coating of water repellent is required in any hight / floor as per direction of Engineer incharge.	% Sft Sqm	6,498.44 699.51
90	Providing & laying wall finish coat of any colour graffiate wall coating 2.5 mm to 3 mm thick straight and swirt for exterior surface at any hight and any floor.	% Sft Sqm	6,085.94 655.11
91	Providing & laying wall finish coat of Venetian grain wall coating 1.5 mm to 3.00 mm thick (straight and swirt in any colour) for exterior surface at any hight and any floor.	% Sft Sqm	8,148.44 877.12
92	Providing & laying wall finish coat of zola coating 1.5 mm to 3.00 mm thick (straight and swirt in any colour) for exterior surface at any hight and any floor.	% Sft Sqm	11,585.94 1,247.14
93	Extra for brick or National tiles facing for every additional 10 feet (3.05 m) height above 10 feet (3.05 m).	100 Sft. Sq.m	593.75 63.91

DADO AND SKIRTING AND FACING
SUB-HEAD CODE 118

S. No.	Description	Unit	Rate in Rs.
94	Extra if scaffolding is required in items Nos 84,85 & 86 of dado and facing for every 10 feet (3.05 m) height above 10 feet.	100 Sq.ft.	1,306.25
		Sq.m	140.60
95	Deduct if hand made brick tiles are used in item No.84 & 88.	100 Sq.ft.	7,700.00
		Sq.m	828.82

IRON STEEL AND ALUMINUM WORKS

Code 119

IRON STEEL & ALUMINUM WORK (S.H-119)

Brief Specification

STRUCTURAL STEEL WORK:

- Structural steel shall conform to the latest British Standards Specification / ASTM standards in all respects. All finished steel shall be well and clearly rolled to the dimensions, sections and weights, as specified or required. It shall be sound and free from cracks, scales, blisters, surface flaws, laminations, cracked edges and defects every sorts.
- Joints in plates, angles, etc., will be made only in such positions as shown on the drawing or as directed by the Engineer-in-Charge. All joints will be cut truly square so as to butt properly together.
- The whole of the workmanship should be of first class quality throughout and true to dimensions. The riveting bolting or welding as specified should be carried out in a perfect manner. During erection, bending, straining or pounding with sledges should not be allowed.
- All holes in girders and columns must be drilled.
- The entire steel work will be executed in the best approved and workman like manner according to the directions of the Engineer-in-Charge.
- The rate for structural steel work shall be inclusive of hoisting and fixing the same in position.

STEEL DOORS AND WINDOWS

- The steel doors and windows shall be of Crittall or equivalent standard obtained from approved manufacturers. They shall be either hot dip galvanized or zinc oxidized. The steel doors and windows are to be supplied completed with all fittings as per schedule or as directed by the Engineer-in-Charge. The doors and windows shall be set straight plumb and level and the contractor shall be responsible for their satisfactory operation after the fixing is complete. Fittings shall be supplied after all plastering is complete or alternately shall be wrapped or protected from damage.

Doors and windows shall in all cases be prepared for putting glazing from the exterior and all necessary spring clips shall be provided by the contractor. Where no specifications for the glazing are supplied by the manufacture the contractor will do

- the glazing in accordance with the specifications for glazing. Putty for glazing to steel doors and windows will be red lead putty composed of whiting and linseed oil of approved brand as directed by the Engineer-in-Charge. The oil shall be in sufficient quality to allow the putty to be worked without being stuck and a small quantity of red lead or mastic cement will be added to it.
- The painting of steel doors and windows and glazing shall not be done till 14 days after fixing of the glass.
- Rate shall be for the net sq.ft area from inside to inside of the wooden frame.

MILD STEEL GRILLS, BALUSTRADES COLLAPSABLE AND ROLLING SHUTTERS, GATES, ETC.

- Mild steel will conform to the latest British Standard / ASTM Specifications and should comply to all the tests contained therein.
- The gates, grills and balustrades shall be fabricated to the details shown on the drawing or as directed by the Engineer-in-Charge in a workmanlike manner. All features shall be strictly accurate and the gates, grills or balustrades will not be fixed in position till it is approved by the Engineer-in-Charge. Unless omitted in the Schedule of Quantities, the tendered cost of the gate or grill, etc. shall include the cost of painting 2 coats of approved ready mixed paint over a coat of primer and all fittings and hinges including supplying and fixing, i.e., the rate shall be for the complete item of work.

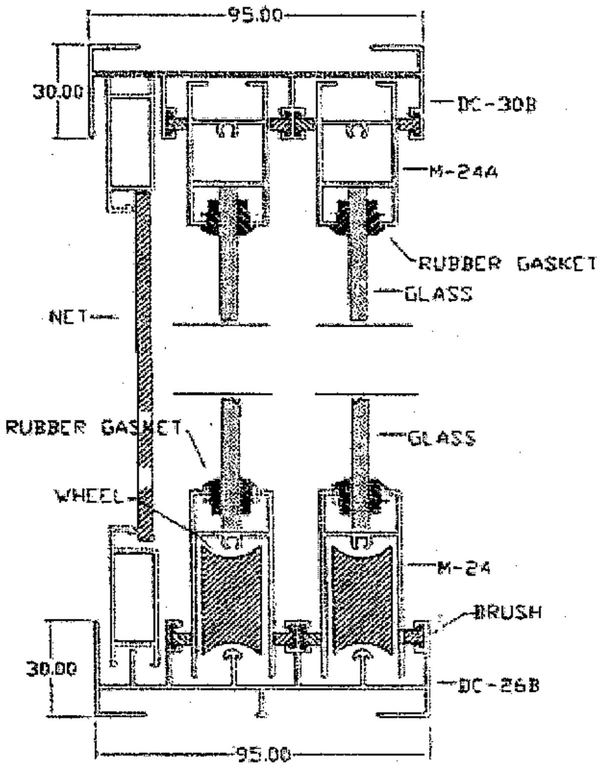
ALUMINIUM DOORS AND WINDOWS:

These shall be made of extruded sections of aluminum alloy conforming to British standards for ally, quality and extrusion. The styles shall be jointed by standard self tapping of stainless steel screws. The special nylon rollers to be, with steel galvanized housing and inner, incorporated anti friction bearings for sliding of leaves. One piece of standard latch shall be provided in the window enabling it to be locked from inside. Door leaf should be removeable from inner side of the frame for easy glazing and cleaning. Vinyl bead shall be used for setting of glass. All extruded sections shall be anodized to give a natural aluminum / bronze finish and other colour spectrum of anodized section as required and provide a non wearing and weather proof oxide coating which also make it scratch free. The windows, doors and hardware shall be procured from standard manufacturers as approved by the Engineer-in-Charges. The Fixing of the aluminum Sections shall be carried out through approved fabricators of the manufacturers. The Aluminum fly / insect screen shall be made from Alclade aluminum having 18 x 16 mesh and to be rust proof. The frames of the screen to be matching to the window. The swing door shall be provided with hinges made of stainless steel. The handles are to be 100mm x 225mm having a good grip and made of aluminum extruded sections having matching finish. Necessary hold fasts on inner side with proper connection to style & rail will be fixed to with stand wind pressure etc. and if desired by Engineer-in-Charge G.I.pipe / angle / M.S.pipe to suite the size with Aluminum section may be provided inside the pipe section for strengthening the purposes.

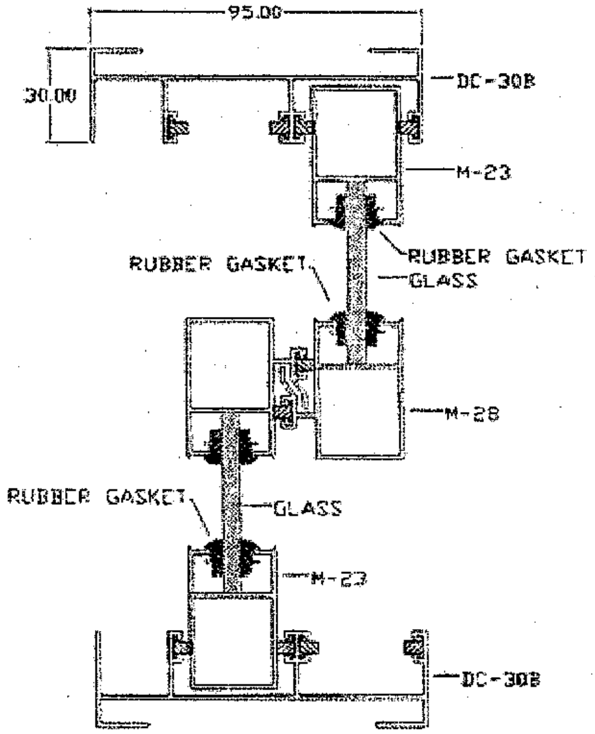
Note: The specifications / details for each and every aluminum items are inserted in the nomenclature. Work shell be carried out as per analyses available in the book of analyses volume II (Sub-Head 119)

DELUXE BOX SLIDING WINDOWS

SIDE VIEW

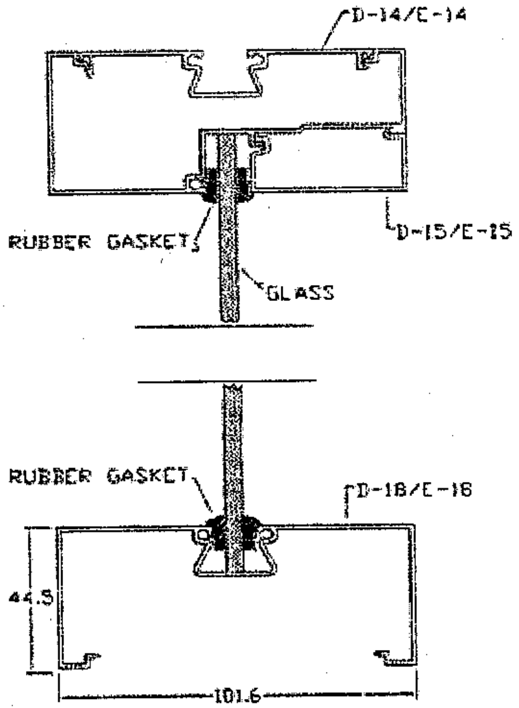


TOP VIEW

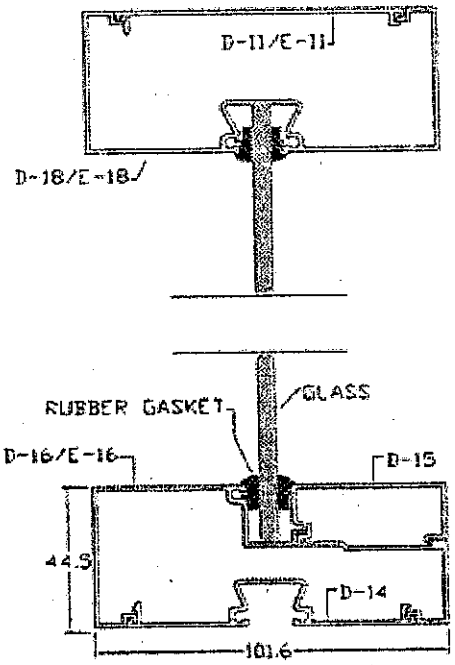


DELUXE FIXED GLAZING

TOP VIEW

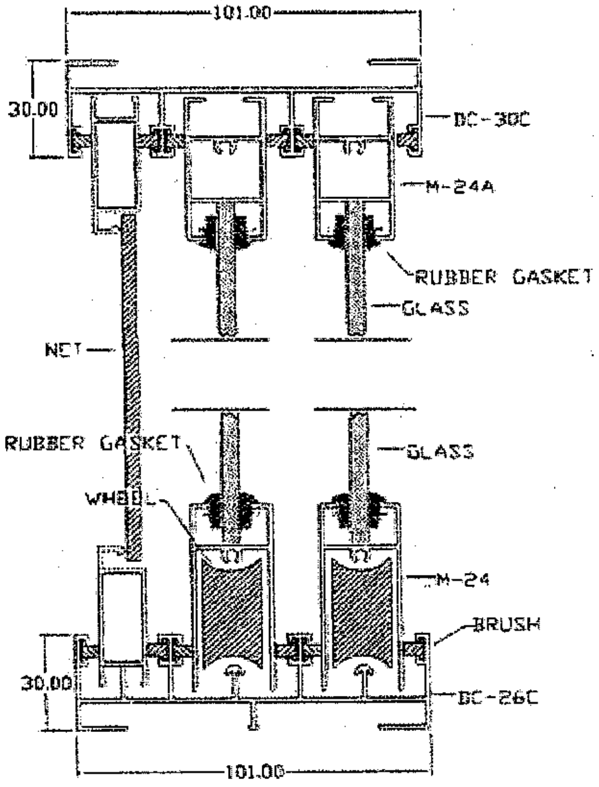


SIDE VIEW

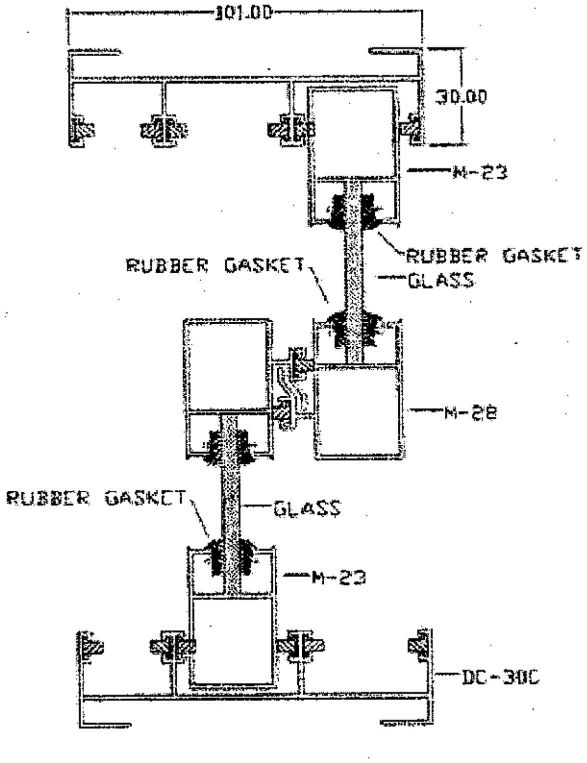


DELUXE BOX SLIDING WINDOWS

SIDE VIEW

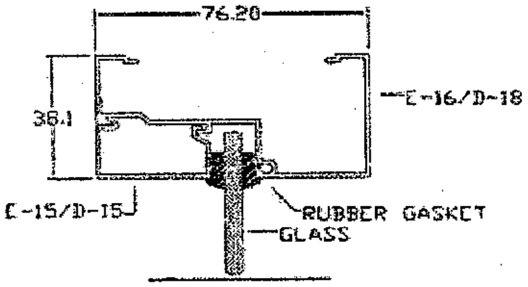


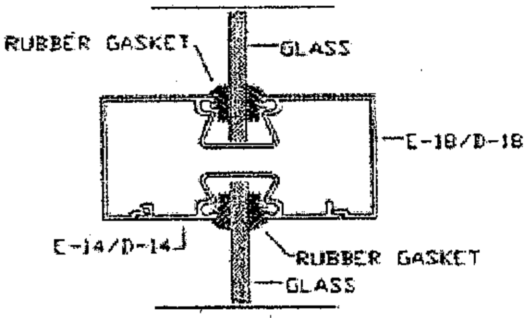
TOP VIEW



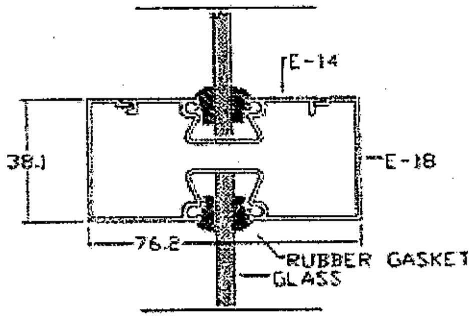
ECONOMY FIXED GLAZING

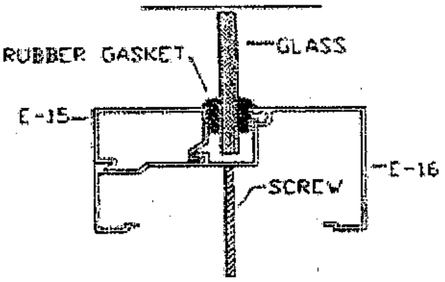
SIDE VIEW





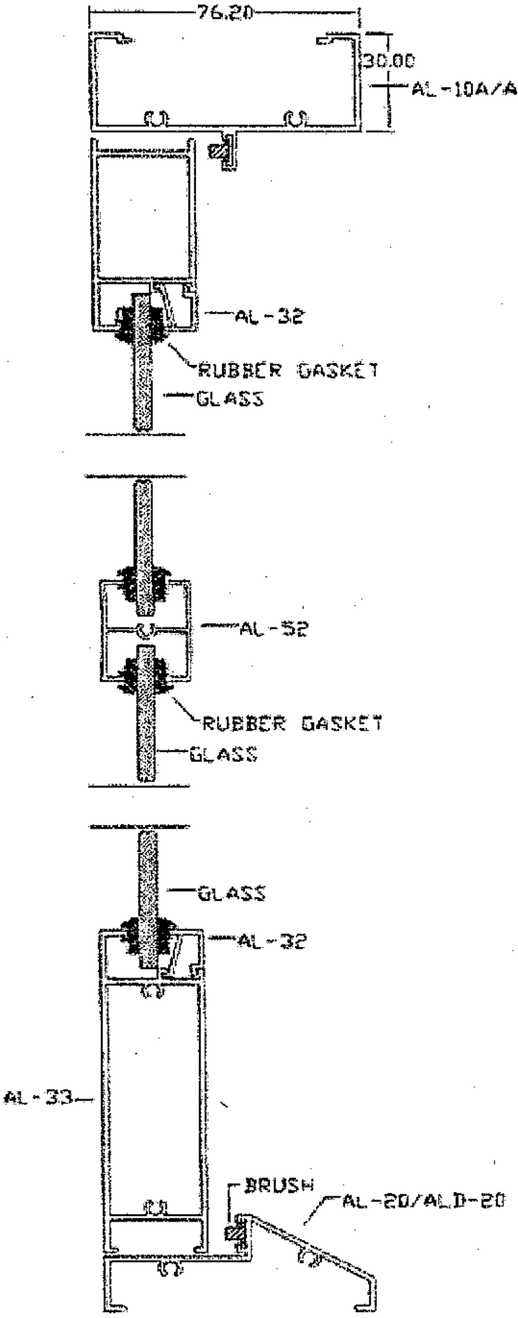
TOP VIEW



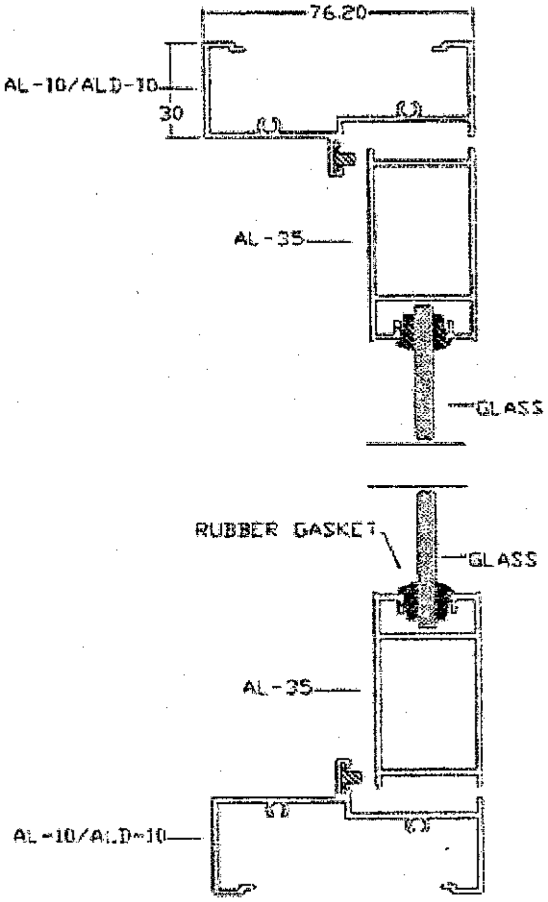


ECONOMY / DELUXE OPENABLE DOORS
"AL" SERIES

SIDE VIEW

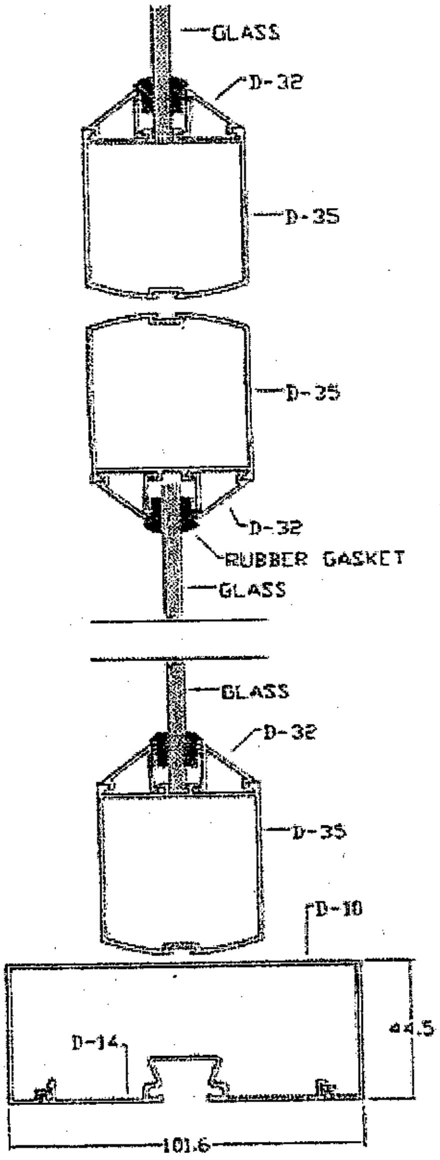


TOP VIEW

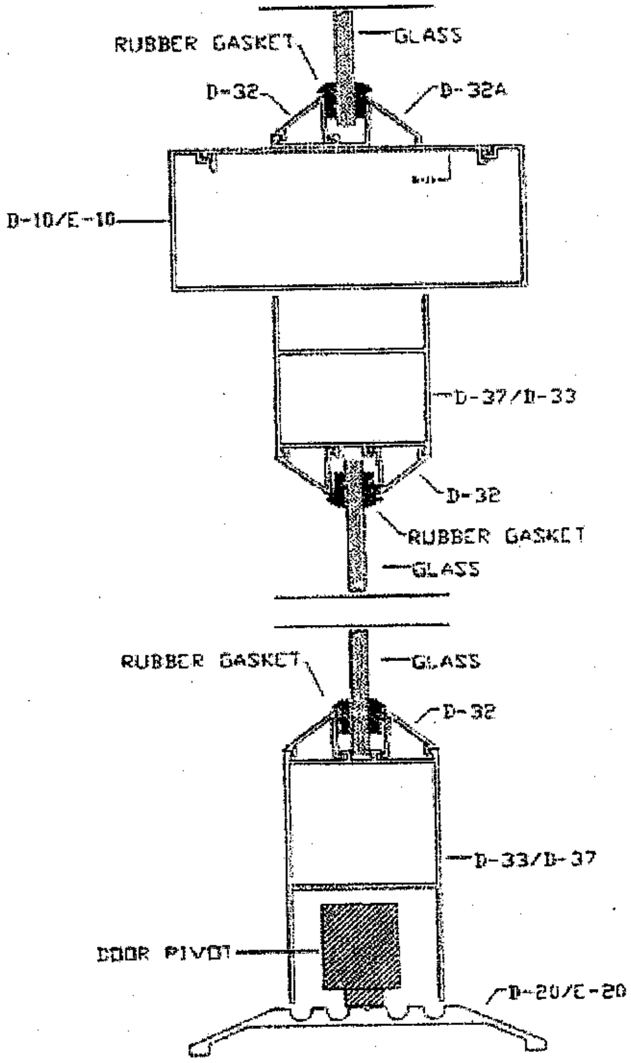


DELUXE FIXED & OPENABLE DOOR

TOP VIEW

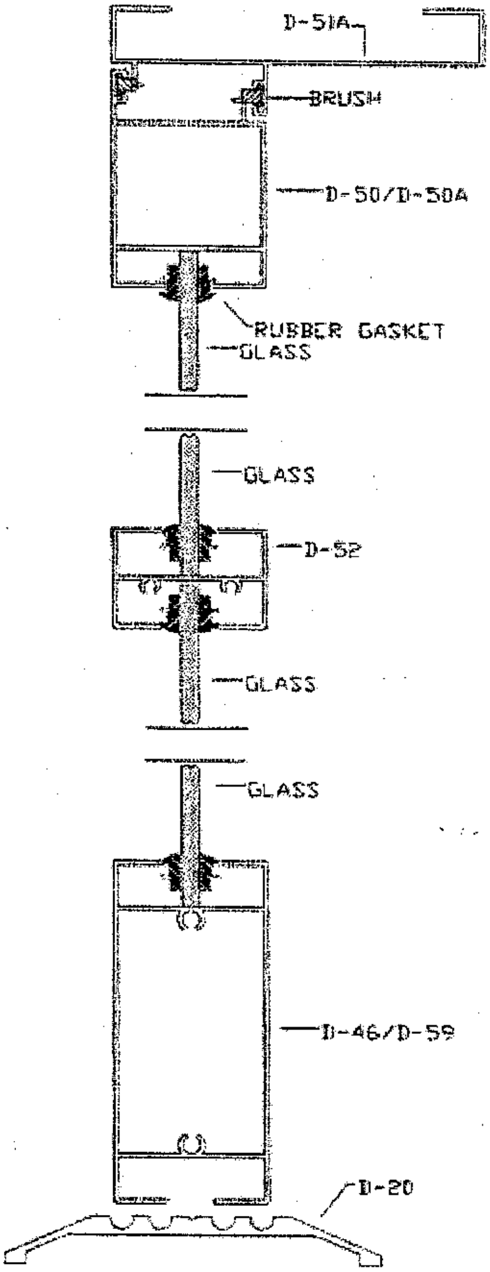


SIDE VIEW

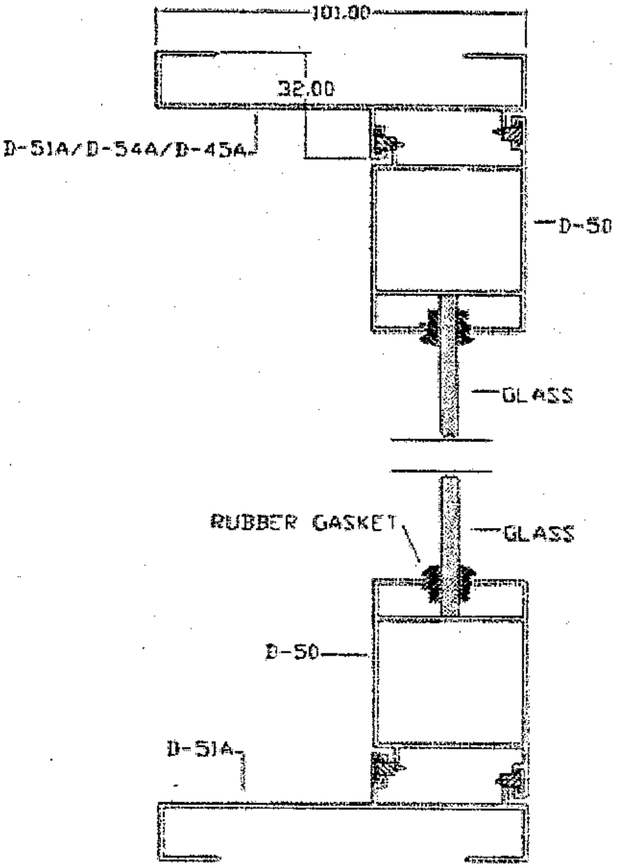


ECONOMY / DELUXE FIXED & OPENABLE DOOR / WINDOWS

SIDE VIEW



TOP VIEW



PAKISTAN PUBLIC WORKS DEPARTMENT

IRON, STEEL AND ALUMINIUM WORKS

SUB-HEAD CODE 119

S. No.	Description	Unit	Rate in Rs.
	(1) DOORS, SHUTTERS AND GATES		
1	Providing and fixing hot dipped galvanized fully glazed single leaf steel doors made to crittal or equivalent standard and of approved sections using approved brass section oxidized fittings, iron lugs, including cutting holes and making good damages to walls etc. complete in any floor.	Sq.ft. Sq.m	1,607.66 17,304.72
2	Providing and fixing hot dipped galvanized fully glazed double leaf steel doors made to crittal or equivalent standard and of approved sections using approved brass section oxidized fittings, iron lugs, including cutting, holes and macking good damages to walls etc. complete as required in any floor..	Sq.ft. Sq.m	1,432.77 15,422.17
3	Providing and fixing fully glazed single leaf steel doors made to crittal or equivalent standard and of approved sections painted with two coats of red oxide paint including using approved brass section oxidized fittings, iron lugs, cutting holes and making good damages to walls etc. complete as required in any floor.	Sq.ft. Sq.m	865.27 9,313.67
4	Providing and fixing fully glazed double leaf steel doors made to crittal or equivalent standard and of approved sections painted with two coats of red oxide paint including using approved brass section oxidized fitting, iron lugs, cutting holes and making good damages to walls etc. complete as required in any floor .	Sq.ft. Sq.m	895.27 9,636.58
5	Providing and fixing single leaf steel doors made to crittal or equivalent standard and of approved sections fully panelled with M. S. Sheet of 16 gauge painted with two coats of red oxide paint including using approved brass section oxidized fitting iron lugs, cutting holes and making good damages to walls etc. complete as required in any floor.	Sq.ft. Sq.m	933.84 10,051.77
6	Providing and fixing double leaf steel doors made to crittal or equivalent standard and of approved sections fully panelled with M. S, Sheet of 16 gauge painted with coats of red oxide paint including using approved brass section oxidized fittings, iron lugs, including cutting. holes and making good damages to walls etc. complete as required in any floor.	Sq.ft. Sq.m	988.98 10,645.24

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S. No.	Description	Unit	Rate in Rs.
7	Providing and fixing hot dipped galvanized single leaf steel doors made to crittal or equivalent standard and of approved sections fully panelled with G.I. Sheet of 16 gauge including using approved brass sections oxidized fittings, iron lugs, including cutting holes and making good damages to walls etc. complete as required in any floor.	Sq.ft. Sq.m	1,246.34 13,415.49
8	Providing and fixing hot dipped galvanized fully panelled double leaf steel doors made to crittal or equivalent standard and of approved sections with G.I. Sheet of 16 gauge including using approved brass section oxidized fittings, iron lugs, cutting holes and making good damages to walls etc. complete as required in any floor.	Sq.ft. Sq.m	1,163.98 12,528.92
9	Providing and fixing hot dipped galvanized partly panelled and partly glazed single leaf steel doors made to crittal or equivalent standard and of approved sections with G.I. Sheets of 16 gauge including using approved brass section oxidized fittings, iron lugs, cutting holes and making good damages to walls etc. complete as required in any floor..	Sq.ft. Sq.m	1,098.84 11,827.81
10	Providing and fixing hot dipped galvanized partly panelled and partly glazed double leaf steel doors made to crittal or equivalent standard and of approved sections with G.I. Sheet of 16 gauge including using approved brass sections oxidized fittings, iron lugs, cutting holes and making good damages to walls etc. complete as required in any floor.	Sq.ft. Sq.m	1,403.85 15,110.93
11	Providing and fixing partly panelled and partly glazed single leaf steel doors made to crittal or equivalent standard and of approved sections with M.S. Sheet of 16 gauge painted with two coats of red oxide paint including using approved brass section oxidized fittings, iron lugs, cutting holes and making good damages to walls etc. complete as required in any floor.	Sq.ft. Sq.m	1,423.84 15,326.08
12	Providing and fixing partly panelled and partly glazed double leaf steel doors made to critical or equivalent standard and of approved sections with M. S. Sheet of 16 Gauge painted with two coats of red oxide paint including using approved brass section oxidized fitting, iron lugs, cutting holes and making good damages to walls etc. complete as required in any floor.	Sq.ft. Sq.m	1,341.35 14,438.19

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S. No.	Description	Unit	Rate in Rs.
13	Providing and fixing M.S. Sheet shutters with angle iron frame and diagonal braces, gunmetal roller and pulleys, angle iron top guides fixed to T-iron brackets painted with two coats of red oxide paint and T-iron bottom track fixed in C.C. 1:2:4 with rag bolts including locking arrangement and handles etc. complete as per instruction of the Engineer-in-Charge.	Cwt	17,452.49
		P.kg	343.54
14	Providing and fixing G.I. corrugated sheet sliding shutters with angle iron frame and diagonal braces, gun metal roller and pulley angle iron top guides fixed to T-iron bracket, painted with two coats of red oxide paint and T-iron bottom track fixed in C.C. 1:2:4 with rag bolts including locking arrangement and handles etc. complete as per instruction of the Engineer-in-Charge in any floor.	Cwt	17,553.40
		P.kg	345.52
15	Providing and fixing G.I. sheet rolling shutters wrth all accessories and fitting encased in G.I. box complete with brackets, arrangement for inside and outside looking with operation handles, cutting holes and making good damages to walls etc. painting two coats of red oxide paint on M. S. section etc. complete as required in any floor.	Cwt	14,435.35
		P.kg	284.15
16	Providing and fixing rolling shutters made of M. S. bars mesh with all accessories and fitting and encased in G.I. box complete with brackets, arrangement for inside and outside locking with operation handles, cutting holes and making good damages to walls etc. painting two coats of red oxide paint on M.S. section etc. complete as required in any floor.	Cwt	16,403.81
		P.kg	322.89
	(2) Sliding, Rolling and Collapsible Shutters and Gates		
17	Providing and fixing collapsible steel shutter or gate with vertical channels, flat iron diagonal top and bottom rails with steel rollers of required size, T-iron bottom track rivetting the junctions, including locking arrangements and handles, cutting and making good damages to walls etc. painting two coats of red oxide paint, fixing bottom track with C.C. 1:2:4 complete as required in any floor ..	Sq.ft.	1,164.23
		Sq.m	12,531.62
18	Providing and fixing steel gate of angle and flat iron sections of approved design with or without M.S. sheet covering including hold fast, with or without rollers and track arrangement including providing wicket shutter of required size with all accessories and locking arrangement complete as per direction of the Engineer-in-Charge.	Cwt	17,600.13
		P.kg	346.44

S. No.	Description	Unit	Rate in Rs.
	(3) Sky-Lights and Windows		
19	Providing and fixing hot dipped galvanized fully glazed fixed steel sky light etc. made to crittal for equivalent standard and of approved sections including iron lugs, cutting holes and making good damages to walls etc. complete as required in any floor.	Sq.ft. Sq.m	884.71 9,522.95
20	Providing and fixing hot dipped galvanized fully glazed single leaf hung steel widows and ventilators made to crittat or equivalent standard and of approved section including using approved brass section oxidized fittings, iron lugs, cutting holes and making good damages to walls etc. complete as required in any floor.	Sq.ft. Sq.m	1,118.29 12,037.12
21	Providing and fixing hot dipped galvanized fully glazed double leaf hung steel windows and ventilators made to crittal or equivalent standard and of approved section including using approved brass section oxidized fittings, iron lugs, cutting holes and making good damages to walls etc. complete as required in any floor.	Sq.ft. Sq.m	1,072.79 11,547.42
22	Providing and fixing hot dipped galvanized fully glazed partly fixed and partly hung steel windows and ventilators made to crittal or equivalent standard and of approved section including using approved brass section oxidized fittings, iron lugs, cutting holes and making good damages to walls etc. complete as required in any floor.	Sq.ft. Sq.m	1,051.99 11,323.48
23	Providing and fixing fully glazed fixed steel sky light etc. made to crittal or equivalent standard and of approved section painted with two coats of red oxide paint including, cutting holes and making good damages to walls etc. complete as required in any floor.	Sq.ft. Sq.m	884.71 9,522.95
24	Providing and fixing fully glazed single leaf hung steel windows and ventilators made to crittal or equivalent standard and of approved sections painted with two coats of red oxide paint including, using approved brass section oxidized fittings, iron lugs, cutting holes and making good damages to walls etc. complete as required in any floor..	Sq.ft. Sq.m	894.35 9,626.74
25	Providing and fixing fully glazed double leaf hung steel windows and ventilators made to crittal or equivalent standard and of approved sections painted with two coats of red oxide paint including using approved brass section oxidized fitting, iron lugs, cutting holes and making good damages to walls etc. complete as required in any floor..	Sq.ft. Sq.m	1,079.07 11,615.00

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S. No.	Description	Unit	Rate in Rs.
26	Providing and fixing fully glazed partly fixed and partly hung steel windows and ventilators made to crittal or equivalent standards and of approved sections painted with two coats of red oxide paint including using approved brass section oxidized fittings, iron lugs, cutting holes and making good damages to walls etc. complete as required in any floor.	Sq.ft. Sq.m	1,079.07 11,615.00
27	Providing and fixing hot dipped galvanized fully glazed fixed steel stair case glazing or factory sashes etc. made to crittal or equivalent standard and of approved section including iron lugs, cutting holes and making good damages to walls etc. complete as required in any floor..	Sq.ft. Sq.m	499.42 5,375.69
28	Providing and fixing hot dipped galvanized fully glazed partly fixed and partly hung steel stair case glazing or factory sashes etc. made to crittal or equivalent standard and of approved sections including using approved brass section, oxidized fittings, iron lugs, cutting holes and making good damages to walls etc. complete as required in any floor.	Sq.ft. Sq.m	676.95 7,286.62
29	Providing and fixing fully glazed partly fixed steel stair case glazing of factory sashes etc. made to crittal or equivalent standard and of approved sections painted with two coats of red oxide paint including iron lugs, cutting holes and making good damages to walls etc. complete as required in any floor.	Sq.ft. Sq.m	495.70 5,335.66
30	Providing and fixing fully glazed partly fixed and partly hung steel stair case glazing or factory sashes etc. made to crittal or equivalent standard and of approved section painted with two coats of red oxide paint including approved brass section oxidized fittings, iron lugs, cutting holes and making good damages to walls etc. complete as required in any floor..	Sq.ft. Sq.m	676.95 7,286.62
	(4) Iron Grills, Iron Bars Hold Fast and Anchor Bolts		
31	Providing and fixing window iron grills with required section of angle iron and M.S square bar as per approved design including welding all sides of the section at the junction and fixing with sunk iron screws, painting two coats of red oxide paint etc. complete as required in any floor in wooden frame .	Cwt Kg	14,930.39 293.89
32	Providing and fixing window iron grills with required section of angle iron and M.S square bar as per approved design including welding all sides of the section at the junction, and fixing with sunk iron screws, painting two coats of red oxide paint etc. complete as required in any floor in masonry or concrete work.	Cwt	14,777.85

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S. No.	Description	Unit	Rate in Rs.
		Kg	290.89
33	Providing and fixing stair railing 3 feet height of M.S Squre pipes 1-1/2" X 1-1/2" 16 SWG, vertical on alaternate step and M.S Square pipe 3/4" x 3/4" 16 SWG 2 Nos, horizontal pipes and 2-1/2" x 2-1/2" , 16 SWG, M.S Square pipe as top rail as per approved design including cutting, welding making holes fixing with sunk iron screws, painting two coats of red oxide paint etc. complete as required in any floor..	Per Rft Per Rm	893.60 2,931.77
34	Providing and fixing railing of M. S. square bars at required spacing with horizontal flat iron as per approved design including making holes fixing with sunk iron screws, painting two coats of red oxide paint etc. complete as required in any floor..	Cwt Kg	16,513.69 325.06
35	Providing and fixing with iron screws hold fasts of flat iron bifurcated at one end as per approved design and size including painting with black bitumastic paint two coats including the cost of embedding with cement concrete 1:2:4 curing etc, complete in any floor.	Lbs Kg	282.38 622.53
36	Providing and fixing mild steel anchor or holding down botts with nuts and washer, welded with M. S. plates if required including painting two coats of black bitumastic paint complete in any floor but excluding cost of cement concrete.	Cwt Kg	230.56 508.30
	(5) Steel Sections................		
37	Providing rolled steel Joists and channels including hoisting and fixing in position in cement concrete in ground floor but excluding cost of cement concrete.	Cwt Kg	14,274.28 280.98
38	Providing M. S. tees, angles and flats including fixing in position etc. complete in ground floor.	Cwt Kg	12,898.53 253.90
39	Providing and fixing R. S. joists and channels including riveting, gusset plates, bolts, nuts, etc. complete with hoisting and erecting in position in steel trusses, frames, tower etc. of any design in ground floor..	Cwt Kg	18,823.14 370.52
40	Providing and fixing M.S. tees, angles and flats including rivetting, fixing with gusset plates, bolts, nuts etc. complete with hoisting and erecting in position in steel trusses, frames, towers, etc. of any design in ground floor.	Cwt Kg	17,674.46 347.91

S. No.	Description	Unit	Rate in Rs.
41	Providing and fixing R. S. Joists and channels including welding all the side of the sections at the junction, gusset plates where reaquired bolts, nuts etc. complete with hoisting and erecting in position in steel trusses, frames, towers and stairs etc of any design in ground floor.	Cwt Kg	17,499.43 344.46
42	Providing and fixing M. S. tees, angles and flats including welding all the sides of the section at the junction, gusset plates where reaquired bolts, nuts etc. complete with hoisting and erecting in position in steel trusses, frames, towers and stairs etc. of any design in ground floor.	Cwt Kg	17,743.10 349.26
	(6) Steel Chowkets................		
43	Providing and fixing M.S. moulded steel door frame of 4" x 2-1/2" (102 mm x 64 mm) manufactured from mild steel sheet of 18 gauge (1.41 mm) conforming to BSS. 1245 having a single rebate size 1-1/2" x 1/2" (38 mm x 13 mm) with provision of 3 Nos. M.S. plate, section 1-1/2" x 1/4" (38 mm x 6 mm), (2 Nos. 6 inch long welded with frame at not less than 10 points and 1 No., 12 inch long welded with frame at not less than 20 points), with holes and threads for fixing steel hinges, fitted with one locking box of same sheet (point welded inside the frame), 6 Nos. 6 inches long flat iron fixing lugs, of 1-1/4" x 3/16" section, treated with special red oxide primer coat all around including cutting holes and filling the cavity with cement concrete 1:2:4 etc. in any floor at any height complete as directed by the Engineer-in-Charge	Rft RM	393.51 1,291.06
44	Providing and fixing M.S. moulded steel door frames of 5.73" x 2-1/2" (146 mm x 63 mm) manufactured from mild steel sheet of 18 gauge (1.41 mm) conforming to B.S.S. 1245 having a double rebate size 1-1/2" x 1/2" (38 mm x 12 mm) provision of 3 Nos. M.S. plate, section 1-1/2" x 1/4" (38 mm x 6 mm) (2 Nos. 6 inch long welded with frame at not less than 10 points and 1 Nos. 12 inch long welded with frame at not less than 20 points), with holes and threads for fixing steel hings, fitted with one locking box of same sheet (point welded inside the frame), 6 Nos. 6 inches long flat iron fixing lugs of 1-1/4" x 3/16" section, treated with special red oxide primer coat all around including cutting holes and filling the cavity with cement concrete 1:2:4 etc. in any floor at any height complete as directed by the Engineer-in-Charge	Rft RM	469.80 1,541.32

S. No.	Description	Unit	Rate in Rs.
45	Providing and fixing M.S. moulded steel door frames of 10" x 2-1/2" manufactured from mild steel sheet of 18 gauge conforming to B.S.S. 1245 having a single/double rebate size 1-1/2" x 1/2" (38 mm x 12 mm) provision of 3 Nos. M.S. plate, section 1-1/2" x 1/4" (38 mm x 6 mm) (2 Nos. 6 inch long welded with frame at not less than 10 points and 1 Nos. 12 inch long welded with frame at not less than 20 points), with holes and threads for fixing steel hinges, fitted with one locking box of same sheet (point welded inside the frame), 6 Nos. 6 inches long flat iron fixing lugs of 1-1/4" x 3/16" section, treated with special red oxide primer coat all around including cutting holes and filling the cavity with cement concrete 1:2:4 etc. in any floor at any height complete as directed by the Engineer-in-Charge	Rft RM	693.86 2,276.45
	(7) Steel Windows and Ventilator		
46	Providing & fixing single leaf hung steel Windows and ventilators made of M.S. pipe (18 gauge) of approved section comprising of frame L-section I-1/2" x I-I/2" shutter frame ofT-Section 2"xI" and I/2"xI/2" M.S. pipe beading for fixing glass panes, clamping the screws at 4 inches center to center, rubber packing for glazing, painted two coats with red oxide paint including using iron lugs, cutting holes and making good damages to walls etc. complete as required in any floor but excluding the cost of glass panes.	Sft. Sqm	1,955.64 21,050.35
47	Providing & fixing double leaf hung steel Windows and ventilators made of M.S. pipe (18 gauge) of approved section comprising of frame L-Section 1-1/2" x 1-1/2", shutter frame of T-Section 2" x 1" and vertical partition of T-Section 2" x 1-1/2" and 1/2" x 1/2" M.S. pipe beading of fixing glass panes, clamping the screws at 4 inches center to center, rubber packing for glazing, painted two coats with red oxide paint including using iron lugs, cutting holes and making good damages to walls etc complete as required in any floor but excluding the cost of glass panes.	Sft. Sqm	1,863.60 20,059.58
48	Providing & fixing partly fixed and partly hung steel Windows and ventilators made of M.S. pipe (18 guage) of approved section comprising of frame L-Section I-I/2" x I-I/2" shutter frame of T Section 2" x 1" and vertical partition of T-Section 2" x I-I/2" and I/2" x I/2" M.S. pipe beading for fixing glass panes, clamping the screws at 4 inches center to center, rubber packing for glazing, painted two coats with red oxide paint including using iron lugs, cutting holes and making good damages to walls etc. complete as required in any floor but excluding the cost of glass panes.	Sft. Sqm	1,747.83 18,813.43

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S. No.	Description	Unit	Rate in Rs.
49	Providing & fixing fixed steel glazing made of M.S. pipe (18 guage) of approved section comprising of frame L-Section 1-1/2" x 1-1/2" and 1/2" x -1/2" M.S. pipe beading for fixing glass panes, clamping the screws at 4 inches center to center, rubber packing for glazing, painted two coats with red oxide paint including using iron lugs, cutting holes and making good damages to walls etc. complete as required in any floor but excluding the cost of glass panes.	Sft.	1,646.37
		Sqm	17,721.32
50	Providing and fixing square pipe railing size 2" x 2" of 16 gauge comprising vertically posts and horizontal bracing of M.S. square pipe of same size as per design including cost of cutting fitting including embedding the braces and posts in floor and walls and making good with cement concrete 1:2:4 in any floor.	Rft	254.28
		Rm	834.26
51	Providing and fixing square pipe railing size l-l/2" x l-l/2" of 16 gauge comprising vertically posts and horizontal bracing of M.S. square pipe of same size as per design including cost of cutting fitting including embedding the braces and posts in floor and walls and making good with cement concrete 1:2:4 in any floor.	Rft	152.88
		Rm	501.57
52	Welding by gas plant upto 10 feet (3,05. m) height from ground floor.	Rft	11.59
		Rm	4.56
53	Welding by electrical plant upto a height of 10 feet (3.05 m) from ground level.	Rft	16.34
		Rm	6.43
54	Providing and fixing G.I. pipe railing of 2" (50 mm) diameter, comprising, vertical posts and horizontal bracing of G.I. pipe of the same dia as per design including cost of specials, bends, threading, cutting and making good the floor or wall of any kind in cement concrete 1:2:4 etc. 'complete in any floor.	Rft	1,123.12
		Rm	3,684.79
55	Providing and fixing G.I. Pipe railing of 1-1/2" (38 mm) diameter comprising, vertical posts and horizontal bracing of G.I- pipe of the same dia, as per design including cost of specials, bends, threading, cutting and making good the floor or wall of any kind in cement concrete 1:2:4 etc. complete in any floor..	Rft	727.55
		Rm	2,386.99
56	Providing and fixing G.I. pipe of 1 inch (25 mm) diameter comprising, vertical posts and horizontal bracing of G,I. pipe of the same dia as per design including cost of specials, bends, threading, cuttings and making good the floor or wall of any kind in cement concrete 1:2:4 etc. complete in any floor.	Rft	459.36
		Rm	1,507.08

S. No.	Description	Unit	Rate in Rs.
57	Extra for first floor on item Nos. 37 to 42.	Rft Rm	706.25 13.90
58	Extra for every additional floor above-first floor on item Nos. 37 to 42.	Rft Rm	510.63 10.05
59	Extra for every additional 10 feet (3.05 m) height above ground level on item 50 to 51.	Rft Rm	11.88 4.68
	(8) Aluminum Works................		
60	Providing and fixing fully glazed **Silver anodized** or powder coated aluminium Fixed windows Partition as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables** , (fixing through their approved fabricators) Deluxe model box section 101.76mm x 44.50mm and **2mm** thick including the cost of aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	822.22 8,850.32
61	Providing and fixing fully glazed **Bronz anodized or powder coated** aluminium Fixed windows Partition as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables .** (fixing through their approved fabricators) deluxe model box section 101.76mm x 44.50mm and **2mm** thick including the cost of aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	847.22 9,119.42
62	Providing and fixing fully glazed **Champagne anodized or powder coated** aluminium Fixed windows Partition as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables .** (fixing through their approved fabricators), Deluxe model box section 101.76mm x 44.50mm and **2mm** thick including the cost of aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	865.97 9,321.24

S. No.	Description	Unit	Rate in Rs.
63	Providing and fixing fully glazed **Silver anodized** aluminium Fixed windows Partition as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables .** (fixing through their approved fabricators), Deluxe model box section 101.76mm x 44.50mm and **1.6mm** thick including the cost of aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	772.22 8,312.12
64	Providing and fixing fully glazed **Bronz anodized or Powder Coated** aluminium Fixed windows Partition as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables .** (fixing through approved fabricators) Deluxe model box section 101.76mm x 44.50mm and **1.6mm** thick including the cost of aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	797.22 8,581.22
65	Providing and fixing fully glazed **Champagne anodized or powder coated aluminium** Fixed windows Partition as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through approved fabricators) Deluxe model box section 101.76mm x 44.50mm and **1.6mm** thick including the cost of aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	815.97 8,783.04
66	Providing and fixing fully glazed **Silver anodized or powder coated aluminium Fixed windows Partition** as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through approved fabricators) Economy model box section 76.2mm x 38.1mm and **2mm** thick including the cost of aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	697.22 7,504.83

S. No.	Description	Unit	Rate in Rs.
67	Providing and fixing fully glazed **Bronz anodized or powder coated aluminium Fixed windows Partition** as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators) economy model box section 76.2mm x 38.1mm and **2mm** thick including the cost of aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	722.22 7,773.93
68	Providing and fixing fully glazed **Champagne anodized or powder coated aluminium Fixed windows Partition** as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Economy model box section 76.2mm x 38.1mm and **2mm** thick including the cost of aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	747.22 8,043.03
69	Providing and fixing doubble glazed **Silver anodized** aluminium Sliding windows as per British standard manufactured by **Lucky, Alcop, Krudson, Pakistan Cables and A.C.P.** (fixing through their approved fabricators), Executive model section dubble or single glazed 101mm x 37mm and **2mm** thick including the cost of aluminium netting ,fitting, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,692.19 18,214.54
70	Providing and fixing double glazed **Bronz anodized or Powder** Coated aluminium Sliding windows as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Executive model section dubble or single glazed 101mm x 37mm and **2mm** thick including the cost of aluminium netting ,fitting, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,742.19 18,752.73

S. No.	Description	Unit	Rate in Rs.
71	Providing and fixing double glazed **Champagne anodized or Powder Coated** aluminium Sliding windows as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Executive model section dubble or single glazed 101mm x 37mm and **2mm** thick including the cost of aluminium netting ,fitting, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft.	1,767.19
		Sqm	19,021.83
72	Providing and fixing double glazed **Silver anodized or Powder Coated** aluminium Sliding windows as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Executive model section dubble or single glazed 101mm x 37mm and **1.6mm** thick including the cost of aluminium netting ,fitting, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft.	1,579.69
		Sqm	17,003.60
73	Providing and fixing double glazed **Bronz anodized or Powder Coated** aluminium Sliding windows as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Executive model section dubble or single glazed 101mm x 37mm and **1.6mm** thick including the cost of aluminium netting ,fitting, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft.	1,617.19
		Sqm	17,407.24
74	Providing and fixing double glazed **Champagne anodized or Powder Coated** aluminium Sliding windows as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Executive model section dubble or single glazed 101mm x 37mm and **1.6mm** thick including the cost of aluminium netting ,fitting, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft.	1,642.19
		Sqm	17,676.34

S. No.	Description	Unit	Rate in Rs.
75	Providing and fixing double glazed **Silver anodized or Powder** Coated aluminium Sliding windows as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), VIP model section dubble or single glazed 100mm x 34mm and **2mm** thick including the cost of aluminium netting ,fitting, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,654.69 17,810.89
76	Providing and fixing double glazed **Bronz anodized or Powder Coated** aluminium Sliding windows as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), VIP model section dubble or single glazed 100mm x 34mm and **2mm** thick including the cost of aluminium netting ,fitting, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,679.69 18,079.99
77	Providing and fixing double glazed **Champagne anodized or powder coated** aluminium Sliding windows as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), VIP model section dubble or single glazed 100mm x 34mm and **2mm** thick including the cost of aluminium netting ,fitting, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,717.19 18,483.63
78	Providing and fixing double glazed **Silver anodized or powder coated** aluminium Sliding windows as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), VIP model section dubble or single glazed 100mm x 34mm and **1.6mm** thick including the cost of aluminium netting ,fitting, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,542.19 16,599.95

S. No.	Description	Unit	Rate in Rs.
79	Providing and fixing double glazed **Bronz anodized or Powder Coated** aluminium Sliding windows as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), VIP model section dubble or single glazed 100mm x 34mm and **1.6mm** thick including the cost of aluminium netting ,fitting, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft.	1,567.19
		Sqm	16,869.05
80	Providing and fixing double glazed **Champagne anodized or powder coated** aluminium Sliding windows as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), VIP model section dubble or single glazed 100mm x 34mm and **1.6mm** thick including the cost of aluminium netting ,fitting, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft.	1,604.69
		Sqm	17,272.70
81	Providing and fixing fully glazed **Silver anodized or powder coated aluminium Swing door** with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Deluxe model section, 76.2mm x 38.1mm and **1.6mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft.	1,740.63
		Sqm	18,735.91
82	Providing and fixing fully glazed **Bronz anodized or Powder Coated aluminium Swing door** with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Deluxe model section, 76.2mm x 38.1mm and **1.6mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft.	1,803.13
		Sqm	19,408.66

S. No.	Description	Unit	Rate in Rs.
83	Providing and fixing fully glazed **Champagne anodized or powder coated aluminium Swing door** with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Deluxe model section, 76.2mm x 38.1mm and **1.6mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,865.63 20,081.40
84	Providing and fixing fully glazed **Silver anodized or powder coated aluminium Swing door** with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabrocators), Deluxe model section, 101.6mm x 44.5mm and **1.6mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,915.63 20,619.60
85	Providing and fixing fully glazed **Bronz anodized or Powder Coated aluminium Swing door** with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabrocators), Deluxe model section, 101.6mm x 44.5mm and **1.6mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,978.13 21,292.34
86	Providing and fixing fully glazed **Champagne anodized or powder coated aluminium Swing door** with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabrocators), Deluxe model section, 101.6mm x 44.5mm and **1.6mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	2,040.63 21,965.08

S. No.	Description	Unit	Rate in Rs.
87	Providing and fixing fully glazed **Silver anodized or powder coated aluminium Swing door** with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Deluxe model section, 76.2mm x 38.1mm and **2mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft.	1,821.88
		Sqm	19,610.48
88	Providing and fixing fully glazed **Bronz anodized or Powder Coated aluminium Swing door** with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Deluxe model section, 76.2mm x 38.1mm and **2mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft.	1,865.63
		Sqm	20,081.40
89	Providing and fixing fully glazed **Champagne anodized or powder coated aluminium Swing door** with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Deluxe model section, 76.2mm x 38.1mm and **2mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft.	1,903.13
		Sqm	20,485.05
90	Providing and fixing fully glazed **Silver anodized or powder coated aluminium Swing door** with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabrocators), Deluxe model section, 101.6mm x 44.5mm and **2mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft.	2,028.13
		Sqm	21,830.53

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S. No.	Description	Unit	Rate in Rs.
91	Providing and fixing fully glazed **Bronz anodized or powder coated aluminium Swing door** with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators) deluxe model section, 101.6mm x 44.5mm and **2mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	2,078.13 22,368.73
92	Providing and fixing fully glazed **Champagne anodized or powder coated aluminium Swing door** with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabrocators), Deluxe model section, 101.6mm x 44.5mm and **2mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	2,115.63 22,772.38
93	Providing and fixing fully glazed **Silver anodized or powder coated aluminium** Sliding windows as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Prime model box section 101mm x 30mm and **1.6mm** thick including the cost of aluminium netting ,fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,154.69 12,428.94
94	Providing and fixing fully glazed **Bronz anodized or powder coated** aluminium Sliding windows as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators) prime model box section 101mm x 30mm and **1.6mm** thick including the cost of aluminium netting ,fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,204.69 12,967.14

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S. No.	Description	Unit	Rate in Rs.
95	Providing and fixing fully glazed **Champagne anodized or powder coated** aluminium Sliding windows as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Prime model box section 101mm x 30mm and **1.6mm** thick including the cost of aluminium netting ,fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,242.19 13,370.78
96	Providing and fixing fully glazed **Silver anodized or powder coated** aluminium Sliding windows as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Prime model box section 101mm x 30mm and **2mm** thick including the cost of aluminium netting ,fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,279.69 13,774.43
97	Providing and fixing fully glazed **Bronz anodized or powder coated aluminium** Sliding windows as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), prime model box section 101mm x 30mm and **2mm** thick including the cost of aluminium netting ,fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,367.19 14,716.27
98	Providing and fixing fully glazed **Champagne anodized or powder coated aluminium Sliding** windows as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Prime model box section 101mm x 30mm and **2mm** thick including the cost of aluminium netting ,fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,367.19 14,716.27

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S. No.	Description	Unit	Rate in Rs.
99	Providing and fixing fully glazed **Silver anodized or powder coated aluminium** Sliding windows as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Deluxe model box section 95mm x 30mm and **1.6mm** thick including the cost of aluminium netting ,fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,129.69 12,159.84
100	Providing and fixing fully glazed **Bronz anodized or powder coated** aluminium Sliding windows as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators) deluxe model box section 95mm x 30mm and **1.6mm** thick including the cost of aluminium netting ,fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,179.69 12,698.04
101	Providing and fixing fully glazed **Champagne anodized or powder coated** aluminium Sliding windows as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Deluxe model box section 95mm x 30mm and **1.6mm** thick including the cost of aluminium netting ,fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,217.19 13,101.68
102	Providing and fixing fully glazed **Silver anodized or powder coated** aluminium Sliding windows as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Deluxe model box section 95mm x 30mm and **2mm** thick including the cost of aluminium netting ,fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,242.19 13,370.78

S. No.	Description	Unit	Rate in Rs.
103	Providing and fixing fully glazed **Bronz anodized or powder coated** aluminium Sliding windows as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators) deluxe model box section 95mm x 30mm and **2mm** thick including the cost of aluminium netting ,fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,279.69 13,774.43
104	Providing and fixing fully glazed **Champagne anodized or powder coated aluminium Sliding windows** as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Deluxe model box section 95mm x 30mm and **2mm** thick including the cost of aluminium netting ,fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,317.19 14,178.07
105	Providing and fixing fully glazed **Silver anodized or powder coated** aluminium Hinged door with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Economy model section, 76.2mm x 30mm and **2mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,678.13 18,063.17
106	Providing and fixing fully glazed **Bronz anodized or Powder Coated** aluminium Hinged door with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Economy model section, 76.2mm x 30mm and **2mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,728.13 18,601.36

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S. No.	Description	Unit	Rate in Rs.
107	Providing and fixing fully glazed **Champagne anodized or powder coated** aluminium Hinged door with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Economy model section, 76.2mm x 30mm and **2mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,765.63 19,005.01
108	Providing and fixing fully glazed **Silver anodized or powder coated** aluminium Hinged door with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Economy model section, 76.2mm x 30mm and **1.6mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,528.13 16,448.58
109	Providing and fixing fully glazed **Bronz anodized or Powder Coated** aluminium Hinged door with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Economy model section, 76.2mm x 30mm and **1.6mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,578.13 16,986.78
110	Providing and fixing fully glazed **Champagne anodized or powder coated aluminium** Hinged door with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Economy model section, 76.2mm x 30mm and **1.6mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,615.63 17,390.43

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S. No.	Description	Unit	Rate in Rs.
111	Providing and fixing fully glazed **Silver anodized** or powder coated aluminium Hinged door with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Deluxe model section, 101.6mm x 30mm and **1.6mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,628.13 17,524.97
112	Providing and fixing fully glazed **Bronz anodized or Powder Coated** aluminium Hinged door with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Deluxe model section, 101.6mm x 30mm and **1.6mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,678.13 18,063.17
113	Providing and fixing fully glazed **Champagne anodized or powder coated** aluminium Hinged door with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing) through their approved fabricators), Deluxe model section, 101.6mm x 30mm and **1.6mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,715.63 18,466.82
114	Providing and fixing fully glazed **Silver anodized or powder coated** aluminium Hinged door with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Deluxe model section, 101.6mm x 30mm and **2mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,753.13 18,870.46

S. No.	Description	Unit	Rate in Rs.
115	Providing and fixing fully glazed **Bronz anodized or Powder Coated** aluminium Hinged door with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), deluxe model section, 101.6mm x 30mm and **2mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,790.63 19,274.11
116	Providing and fixing fully glazed **Champagne anodized or powder coated** aluminium Hinged door with frame as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Deluxe model section, 101.6mm x 30mm and **2mm** thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	1,840.63 19,812.30
117	Providing and fixing fully glazed **Silver anodized or powder coated** aluminium Fixed windows Partition as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Economy model box section 76.2mm x 38.1mm and **1.6mm** thick including the cost of aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	772.22 8,312.12
118	Providing and fixing fully glazed **Bronz anodized or Powder coated** aluminium Fixed windows Partition as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Economy model box section 76.2mm x 38.1mm and **1.6mm** thick including the cost of aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft. Sqm	822.22 8,850.32

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S. No.	Description	Unit	Rate in Rs.
119	Providing and fixing fully glazed **Champagne anodized or powder coated** aluminium Fixed windows Partition as per British standard manufactured by **Lucky, Prime, Chawla, Krudson and Pakistan Cables.** (fixing through their approved fabricators), Economy model box section 76.2mm x 38.1mm and **1.6mm** thick including the cost of aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans.	Sft.	859.72
		Sqm	9,253.96
120	Providing and fixing plain glass panes 6mm thick to M.S. Box pipe / Aluminium door, windows and ventilators including the cost of labour but excluding the cost of M.S. square pipe beading, rubber packing and screw in any floor at any height.	Sft.	297.02
		Sqm	3,197.12
121	Providing and fixing Tinted glass panes 5mm thick to M.S. Box pipe / Aluminium door, windows and ventilators including the cost of labour but excluding the cost of M.S. square pipe beading, rubber packing and screw in any floor at any height.	Sft.	371.82
		Sqm	4,002.26
122	P/F 12mm thick tempered glass, Swing door Pak made as per approved manufacturers (fixing through their approved fabricators), D-Lock, Silicon, moving machines all accessories, cutting holes etc and making good damages etc complete as required in any floor as per direction of Engineer incharge.	Sft.	2,263.39
		Sqm	24,362.93
123	P/F 12mm tempered glass i/c 3mm safety film 175 micron aluminum fixed Partition as per approved manufacturers (fixing through their approved fabricators), aluminum section D-48 (100mm x 38mm and 2mm) thick i/c the aluminum fittings and S.S. pipe 1.5" x 3"(18 gauge) fixed on top with all accessories cutting hole etc and making good damages etc complete as required in any floor as per direction of Engineer incharge.	Sft.	1,610.60
		Sqm	17,336.31
124	Providing and fixing M.S "D" Type rail 3" dia 18 SWG for stair railing including cutting, welding and painting with red oxied etc complete as per direction of the Engineer incharge.	Per Rft	397.40
		Per Rm	1,303.79

WOOD WORK

Code 120

WOOD WORK (S.H-120)

Brief Specification

Wood work is the process of converting timber into a desired shape and creating it into its final position..

Timber shall conform to general specification according to the species stipulated in the item of work Timber shall be from the heart of a sound and full grown tree the sap wood being entirely removed. It shall be free from large or dead knots, twists cracks, incipient decay plain shakes or blemishes of any kind and shall be thoroughly seasoned. Any timber rejected by the Engineer-in-Charge shall be removed by the contactor from the site of work within 24 hours. All work shall be neatly and truly finished to the exact dimensions required. Wood work which is exposed to view shall be accurately planed to the required dimensions. All work must fit accurately without wedging or filling. All joints or scarf's shall fit truly and fully. Where specified the ends of the tendons shall not show. Joints shall be painted with white or red lead before the frames are put together.

All portions of timber, built into or against or close to masonry or concrete and all junctions of rafters, portions of beams and wall plates shall be given 2 coats of Solignum or other wood preservative approved by the Engineer-in-Charge. No payment for this will be made. The contractor shall be responsible for the easing or otherwise of all doors and windows, etc and the closing of all open joint which may occur within the period prescribed in the agreement which in the opinion of the Engineer-in-Charge should be attended to.

All wood work shall be passed and initialed by the Assistant Executive Engineer before being finally fixed in position. No timber work shall be painted, tarred or oiled without prior approval of the Engineer-in-Charge. All wood work will be paid by net measurement, no allowances being made for wastage or for any dimensions supplied beyond those specified. The length of each piece will be measured overall so as to include projections for tenons. Similarly deductions due to taking out of rebate or providing mouldings will not be made. The area of shutters will be measured with the doors shut i.e. measurement of the overlapping area at the meeting styles will not be recorded.

FRAME OF DOORS WINDOWS. VENTILATIONS FAN LIGHT ETC.

Timber shall comply with the general specification for wood work. The species of timber shall be according to the provision made in the item of work. Frame shall be fixed to the masonry by means of holdfasts of required size. Unless otherwise specified ventilators, fan light and clear-storey windows shall be provided with 2 holdfasts windows with 4 holdfasts and doors with 6 holdfasts.

LV HOLD FAST

The size of the holdfast for doors shall be 12" x 1-1/2" x ¼" and for windows, ventilators 9" x 1-1/2" x ¼". The ends of the holdfast shall be split and bent.

The contractors rate for holdfast shall include the cost of screws concrete fixing etc complete.

Unless otherwise specified in the schedule of quantities, the cost of the holdfast shall not be included in the cost of door and window frames. Where the holdfast is to have a pivot. the same shall be of the diameter shown on the drawing and shall be riveted to the flat of the holdfast. Holdfast must have one of its ends split and must be embedded in 1:2:4 cement concrete for the full length of the hold fast and the width of the wall. The depth of embedding will be 6".

TRUSSES ROOFS SCANTLING AND DUNNAGE:

Timber shall conform to the general specification for the timer and shall be of the species as described in the item of work.

Wood work shall be done in best work manship, properly wrought and framed in trusses. All joining shall be according to the detailed drawings and trusses be secured in position with proper anchoring as given in the drawings.

FULLY PANELLED SHUTTERS:

Unless otherwise specified, the timber shall conform to specification and shall be of the species as described in the item of work. The paneled shutters shall conform to the design attached with the agreement and the dimensions shall be as shown on that drawing.

All styles and rails shall be properly mortised and shall be tenoned. The thickness of tenon shall not exceed 1/3 and not be loss than 1/4th of the thickness of the plank and the width shall not exceed 5 times the thickness. All rails over 7" in depth shall have double tenons. All tenons shall pass completely through styles and shall be secured by hard wood pins.

Panels shall be made of solid wood or hard board or ply wood or any other material as specified in the Item of work. These shall be truly cut and framed into the beds to a depth not less than 3/8". The thickness of panels shall be as specified. Panels shall be one piece upto 12" size in case of deodar and other species except for teak where it shall be 18". In larger sizes, panels shall be joined but the joint shall be glued and dowelled together to avoid all possibility of its opening afterwards. Panels shall be finished smooth so that no mark is visible. Unless otherwise specified, simple moulded projected beading shall be fixed all-round the panels on both the faces of shutters. All hinges shall be countersunk into the chowkhats as well as in the leaf, the recess being cut to the exact size and depth of the hinges no subsequent packing being tolerated. The hinges will be fixed by means of screws of the approved size. The frame shall be rebated on one side ½" deep and to the full thickness of the shutter as specified in the schedule of quantities. The other sides shall have a return bead, or be chamfered or rebated or grooved according to design.

FULLY GLAZED SHUTTERS:

Quality as per specification mentioned in Preceding paras

- Design as per specification mentioned in Preceding paras.
- Dimension same as per specification mentioned in Preceding paras.

Shutter as per item of fully paneled shutter. Sash bars shall be of the same thickness as of the leaf and shall be 1 inch to 1-1/4" wide, according to the size of the doors and shall be twice rebated and mitred on the outside unless otherwise specified. The size of the rebate shall be 3/8" x ½" to receive the glass and its fixing. Unless otherwise specified, all glass shall be patent, flattened sheet or plate glass of the best quality. Unless otherwise required all glazing shall be frosted or ground glass available in market and as approved by the Engineer-in-Charge. The glass shall be free from specks. bubbles distortions and flaws of any kind and shall be properly cut to fit the rebates of the sashes truly etc so as to leave a unform space of 1/6" all-round the panels.

When plate glass is required or specified, it shall be unless otherwise described polished patent plate glass of the approved quality. It shall be of a unsual light colour shall be transparent. It shall be such as as to give clear vision. It shall not be confused with thick drawn sheet glass. No glass will be inserted in frames until they have been primed and prepared for painting so that the putty may adhere properly.

WOOD WORKS
SUB-HEAD CODE 120

S. No.	Description	Unit	Rate in Rs.
	(1) DOORS AND WINDOWS FRAMES		
1	Providing and fixing best quality imported teak wood frames for doors, windows, ventilators, clerestory, windows, shelves partitions, trellis work, etc., as required .	Cft. Cu.m.	22,160.33 782,569.81
2	Providing and fixing best quality deodar frames for doors. windows, ventilators, clerestory windows, shelves, partitions, trellis work, etc., as required .	Cft. Cu.m.	12,731.98 449,626.18
3	Providing and fixing best quality pan wood frames for doors, windows, ventilators, clerestory, windows, shelves, partitions, trellis work, etc., as required.	Cft. Cu.m.	6,215.26 219,490.18
4	Providing and fixing best quality shesham wood frames for doors, windows, ventilators, clerestory, windows, shelves partitions, trellis Work, etc., as required .	Cft. Cu.m.	6,675.46 235,741.69
5	Providing and fixing best quality sal wood frames for doors, windows, ventilators, clerestory, windows, shelves partitions, trellis work, etc., as required .	Cft. Cu.m.	7,356.59 259,795.61
6	Providing and fixing best quality teak wood built in frame with 1/2 inch (13 mm) thick imported teak wood beading as stopper for doors, windows, ventilators, clerestory, windows, shelves, partitions, trellies work, etc.,as required	Cft. Cu.m.	23,596.13 833,273.74
7	Providing and fixing best quality deodar wood built in frame with 1/2 inch (13 mm) thick deodar wood beading as stopper for doors, windows, ventilators, clerestory, windows, shelves, partitions, trellis work, etc., as required	Cft. Cu.m.	14,088.90 497,545.40
8	Providing and fixing best quality veneered imported teak wood frame having base wood of deodar for doors, windows, ventilators, clerestory, windows, shelves, partitions, trellis work, etc., as required..	Cft. Cu.m.	12,965.79 457,882.91
9	Providing, fixing and hoisting best quality deodar wood wrought and framed in trusses and other roof scantlings including all necessary iron work for fixing and anchoring in position, etc.	Cft. Cu.m.	13,808.76 487,652.10
10	Providing, fixing and hoisting best quality pan wood wrought and framed in trusses and other roof scantlings including all necessary iron work for fixing and anchoring in position, etc., as required .	Cft. Cu.m.	7,745.69 273,536.59
11	Providing, fixing and hoisting best quality sal wood wrought and framed in trusses and other roof scantlings including all necessary iron work for fixing and anchoring in position, *etc.*, as required	Cft. Cu.m.	8,658.08 305,757.37

WOOD WORKS
SUB-HEAD CODE 120

S. No.	Description	Unit	Rate in Rs.
12	Providing, fixing and hoisting best quality sal ballies 2-1/2" dia (63 mm) in trusses and other roof scantlings including all necessary iron work for fixing and anchoring in position, etc., as required .	Rft Rum	1,575.95 55,654.35
13	Providing, fixing and hoisting best quality shesham wood of required section swan and framed for dunnage with necessary iron work, as required.	Cft. Cu.m.	5,904.07 208,500.51
	(2) FULLY PANELLED SHUTTERS		
14	Providing and fixing 2 inches (51 mm) thick best quality imported teak wood shutter fully panelled with same wood, approved brass hinges and tower bolts etc., as required..	Sq.ft. Sq.m	3,382.90 36,413.23
15	Providing and fixing 1-3/4 inch (44 mm) thick best quality imported teak wood shutters fully panelled with same wood, approved brass hinges and tower bolts, etc., as required	Sq.ft. Sq.m	3,123.08 33,616.52
16	Providing and fixing 1-1/2 inch (38 mm) thick best quality imported teak wood shutters fully panelled with same wood, approved brass hinges and tower bolts, etc., as required .	Sq.ft. Sq.m	2,991.32 32,198.29
17	Providing and fixing 1-1/2 inch (38 mm) thick best quality imported teak wood shutters fully panelled with teak ply wood (5 ply), approved brass hinges and tower bolts, etc., as required..	Sq.ft. Sq.m	2,062.58 22,201.40
18	Providing and fixing 1-1/2 inch (38 mm) thick best quality imported teak wood shutters fully panelled with teak ply wood (3 ply), approved brass hinges and tower bolts, etc., as required.	Sq.ft. Sq.m	2,024.77 21,794.44
19	Providing and fixing 1-1/4 inch (32 mm) thick best quality imported teak wood shutters fully panelled with same wood, approved brass hinges and tower bolts, etc., as required	Sq.ft. Sq.m	2,723.28 29,313.13
20	Providing and fixing 2 inch (51 mm) thick best quality deodar wood shutters fully panelled with same wood, approved iron hinges and tower bolts, etc., as required	Sq.ft. Sq.m	1,926.53 20,737.00
21	Providing and fixing 1-3/4 inch (44 mm) thick best quality deodar wood shutters fully panelled with same wood, approved iron hinges and tower bolts, etc., as required...	Sq.ft. Sq.m	1,759.61 18,940.30
22	Providing and fixing 1-1/2 inch (38 mm) thick best quality deodar wood shutters fully panelled with same wood, approved iron hinges and tower bolts, etc., as required..	Sq.ft. Sq.m	1,651.66 17,778.30
23	Providing and fixing 1-1/2 inch (38 mm) thick best quality deodar wood shutters fully panelled with 5/16 inch (7.9 mm) thick hard board (masonite), approved iron hinges and tower botts, etc., as required.	Sq.ft. Sq.m	1,151.75 12,397.32

WOOD WORKS

SUB-HEAD CODE 120

S. No.	Description	Unit	Rate in Rs.
24	Providing and fixing 1-1/2 inch (38 mm) thick best quality deodar wood shutters fully panelled with 1 /4 inch (6.4 mm) thick hard board (masonite), approved iron hinges and tower bolts, etc., as required.	Sq.ft. Sq.m	1,141.45 12,286.43
25	Providing and fixing 1-1/2 inch (38 mm) thick best quality deodar wood shutters fully panelled with 3/16 inch (4.8 mm) thick hard board (masonite), approved iron hinges and tower bolts, etc., as required.	Sq.ft. Sq.m	1,139.39 12,264.25
26	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood shutters fully panelled with 1/2 inch (13 mm) thick chip board (density 500 kg. per cubic meter), iron hinges and tower bolts etc. as required.	Sq.ft. Sq.m	1,151.75 12,397.32
27	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood shutters fully panelled with commercial ply wood (5 ply), approved iron hinges and tower bolts etc., as required.	Sq.ft. Sq.m	1,167.30 12,564.70
28	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood shutters fully panelled with commercial plywood (3 ply), approved iron hinges and tower bolts etc., as required..	Sq.ft. Sq.m	1,151.75 12,397.32
29	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood shutters fully panelled with 1/4 inch (6.4 mm) thick plain asbestos cement sheet, approved iron hinges and tower bolts etc., as required.	Sq.ft. Sq.m	1,264.77 13,613.81
30	Providing and fixing 1-1/4 inches (32 mm) thick best quality deodar wood shutters fully panelled with same wood approved iron hinges and tower bolts etc., as required.	Sq.ft. Sq.m	1,515.52 16,312.93
31	P/F 1-1/2 inch (38mm) thick best quality Ash wood shutters fully panelled with same wood (approved design), approved Iron hinges and tower bolts, etc as required.	Sq.ft. Sq.m	1,694.26 18,236.88
32	Providing and fixing 1-1/4 inches (32 mm) thick best quality Ash wood shutters fully panelled with same wood approved iron hinges and tower bolts etc., as required.	Sq.ft. Sq.m	1,515.52 16,312.93
	(3) FULLY GLAZED SHUTTERS		
33	Providing and fixing 2 inches (51 mm) thick best quality imported teak wood shutters fully glazed with 1/4 inch (6.4 mm) thick plate glass of approved quality and approved brass hinges tower bolts, teak wood beading and putty packing to glasses as required.	Sq.ft. Sq.m	2,784.04 29,967.13
34	Providing and fixing 1-3/4 inches (44 mm) thick best quality imported teak wood ;shutters fully glazed with 1/4 inches (6.4 mm) thick plate glass of approved quality and approved brass hinges tower bolts, teak wood beading and putty packing to glasses etc., as required.	Sq.ft. Sq.m	2,569.67 27,659.69

WOOD WORKS

SUB-HEAD CODE 120

S. No.	Description	Unit	Rate in Rs.
35	Providing and fixing 1-1/2 inches (38 mm) thick best quality imported teak wood shutters fully glazed with plain glass panes 24 oz. (7.3 kg/s.M) approved brass hinges, tower bolts, teak wood beading and putty packing to glasses etc., as required.	Sq.ft. Sq.m	2,368.45 25,493.72
36	Providing and fixing 1-1/4 inches (32 mm) thick best quality imported teak wood shutters fully glazed with plain glass panes 24 oz. (7.3 kg/s.M) approved brass hinges, tower bolt, teak wood beading and putty packing to glasses etc., as required.	Sq.ft. Sq.m	2,025.47 21,801.96
37	Providing and fixing 1 inch (25 mm) thick best quality imported teak wood shutters fully glazed with plain glass panes 24 oz. (7.3 Kg./SM), approved brass hinges, tower bolt, teak wood beading and putty packing to glasses etc., as required.	Sq.ft. Sq.m	3,379.08 36,372.06
38	Providing and fixing 2 inches (51 mm) best quality deodar wood shutters fully glazed with 1/4 inch (6.4 mm) thick plate glass of approved quality and approved quality and approved iron hinges, tower bolt, deodar wood beading and putty packing to glasses etc., as required..	Sq.ft. Sq.m	1,582.31 17,031.80
39	Providing and fixing 1-3/4 inches (44 mm) thick best quality deodar wood shutters fully glazed with 1/4 inch (6.4 mm) thick plate glass of approved quality and approved iron hinges, tower bolt, deodar wood beading and putty packing to glasses etc., as required.	Sq.ft. Sq.m	1,482.74 15,960.11
40	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood shutter fully glazed with plain glass panes 24 oz. (7.3 kg./s.M.) approved iron hinges, tower bolts, deodar wood beading and putty packing to glasses etc., as approved.	Sq.ft. Sq.m	1,238.26 13,328.48
41	Providing and fixing 1-1/4 inches (32 mm) thick best quality deodar wood shutters fully glazed with plain glass panes 24 oz. (7.3 kg./SM), approved iron hinges, tower bolt, deodar wood beading and putty packing to glasses etc., as required.	Sq.ft. Sq.m	1,154.10 12,422.65
42	Providing and fixing 1 inch (25 mm) best quality deodar wood shutters fully glazed with plain glass panes 24 oz. (7.3 kg./SM), approved iron hinges, tower bolt, deodar wood beading and putty packing to glasses etc., as required.	Sq.ft. Sq.m	1,051.89 11,322.45
	(4) PARTLY PANELLED AND PARTLY GLAZED SHUTTERED		
43	Providing and fixing 2 inches (51 mm) thick best quality imported teak wood shutters partly panelled and partly glazed with approved brass hinges and tower bolts, teak wood beading and putty packing to glasses, 1/4 inches (6.4 mm) thick plain plate glass of approved quality, etc., as required..	Sq.ft. Sq.m	2,721.82 29,297.41

WOOD WORKS
SUB-HEAD CODE 120

S. No.	Description	Unit	Rate in Rs.
44	Providing and fixing 1-3/4 inches (44 mm) thick best quality imported teak wood shutters partly panelled and partly glazed with 1/4 inch (6.4 mm) thick plate glass using approved brass hinges and tower bolts, teak wood beading and putty packing to glasses etc., as required.	Sq.ft. Sq.m	2,539.90 27,339.24
45	Providing and fixing 1-1/2 inches (38 mm) thick best quality imported teak wood shutters partly panelled and partly glazed with plain glass panes 24 oz. (7.3 kg./SM), approved brass hinges and tower bolts, teak wood beading and putty packing to glasses etc., as required.	Sq.ft. Sq.m	2,385.80 25,680.54
46	Providing and fixing 1-1/4 inches (32 mm) thick best quality imported teak wood shutters partly panelled and partly glazed with plain glass panes 24 oz. (7.3 Kg./SM), approved brass hinges and tower bolts, teak wood beading and putty packing to glasses etc., as required.	Sq.ft. Sq.m	2,066.54 22,244.08
47	Providing and fixing 1 inch (25 mm) thick best quality imported teak wood shutters partly panelled and partly glazed with plain glass panes 24 oz. (7.3 kg./SM), approved brass hinges and tower bolts, teak wood beading and packing to glasses etc., as required.	Sq.ft. Sq.m	2,013.08 21,668.57
48	Providing and fixing 2 inches (51 mm) thick best quality deodar wood shutters partly panelled and partly glazed with 1/4 inch (6.4 mm) thick plate glass of approved quality, approved iron hinges and tower bolt, deodar wood beading and putty packing to glasses etc., as required...	Sq.ft. Sq.m	1,598.53 17,206.40
49	Providing and fixing 1-3/4 inches (44 mm) thick best quality deodar wood shutters partly panelled and partly glazed with 1/4 inch (6.4 mm) thick plate glass of approved quality, approved iron hinges and tower bolts, deodar wood beading and putty packing to glasses etc., as required.	Sq.ft. Sq.m	1,463.56 15,753.65
50	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood shutters partly panelled and partly glazed with plain glass panes 24 oz. (7.3 kg/SM), approved iron hinges and tower bolts, deodar wood beading and putty packing to glasses etc., as required...	Sq.ft. Sq.m	1,343.22 14,458.33
51	Providing and fixing 1-1/4 inch (32 mm) thick best quality deodar wood shutters partly panelled and partly glazed with plain glass panes 24 oz. (7.3 kg/SM), approved iron hinges and tower bolts, deodar wood beading and putty packing to glasses etc., as required.	Sq.ft. Sq.m	1,283.17 13,811.94
52	Providing and fixing 1 inch (25 mm) thick best quality deodar wood, partly panelled and partly glazed with plain glass panes 24 oz. (7.3 Kg./SM) approved iron hinges and tower bolts, deodar wood beading and putty packing to glasses etc., as required..	Sq.ft. Sq.m	1,104.23 11,885.84
	(5) FULLY VENETIANED SHUTTERS		
53	Providing and fixing 2 inches (51 mm) thick best quality imported teak wood shutters fully venetianed with moveable blade, approved brass hinges and tower bolts, sash fasteners, catches etc., as required.	Sq.ft. Sq.m	4,018.03 43,249.63

WOOD WORKS

SUB-HEAD CODE 120

S. No.	Description	Unit	Rate in Rs.
54	Providing and fixing 1-3/4 inches (44 mm) thick quality imported teak wood shutters fully venetianed with moveable blade, approved brass hinges and tower bolts, sash fasteners, catches etc., as required..	Sq.ft. Sq.m	3,771.54 40,596.45
55	Providing and fixing 1-1/2 inches (38 mm) thick best quality imported teak wood shutters fully venetianed with moveable blade, approved brass hinges and tower botts sash fasteners catches etc., as required.	Sq.ft. Sq.m	3,850.14 41,442.52
56	Providing and fixing 1-1/4 inches (32 mm) thick best quality imported teak wood shutters fully venetianed with moveable blade, approved brass hinges and tower bolts, sash fasteners, catches etc., as required.	Sq.ft. Sq.m	3,572.39 38,452.83
57	Providing and fixing 2 inches (51 mm) thick best quality deodar wood shutters fully venetianed with moveable blades, approved iron hinges and tower bolts, sash fasteners, catches etc., as required.	Sq.ft. Sq.m	2,196.00 23,637.54
58	Providing and fixing 1-3/4 inches (44 mm) thick best quality deodar wood shutters fully venetianed with moveable blade, approved hinges and tower bolts sash fasteners, catches etc., as required.	Sq.ft. Sq.m	2,123.92 22,861.67
59	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood ; shutters fully venetianed with moveable blade, approved iron hinges and tower bolts sash fasteners, catches etc., as required.	Sq.ft. Sq.m	2,205.53 23,740.11
60	Providing and fixing 1-1/4 inches (32 mm) best quality deodar wood shutters fully venetianed with moveable blade approved iron hinges and towers bolts sash fasteners catches etc., as required.	Sq.ft. Sq.m	2,131.80 22,946.43
	(6) FULLY VENEERED SHUTTERS		
61	Providing and fixing solid core 1st class teak wood veneered flush door shutters of 1-1/2 inches (38 mm) thickness with and including the cost of teak wood veneer facing of not less than 1 mm thickness on either side, cross band of standard specification, with solid fully laminated core, 2 inches (51 mm) wide best quality deodar wood outer faces alround as commercially produced by standard manufacturers under power driven hydraulic press as approved by Engineer-in-Charge including brass fittings etc., complete but excluding the cost of handles and locking arrangement .	Sq.ft. Sq.m	2,164.85 23,302.18
62	Providing and fixing solid core first class teak wood veneered flush door shutters of 1-1/4 inches (32 mm) thickness with and including the cost of teak wood veneer facing of not less than 1 mm thickness on either side cross bend of standard specification, with solid fully laminated core, 2 inches (51 mm) wide best quality deodar wood outer faces alround as commercially produced by standard manufacturers under power driven hydraulic press as approved by Engineer-in-charge including brass fitting etc., complete but excluding the cost of handles and locking arrangement .	Sq.ft. Sq.m	1,914.85 20,611.20

WOOD WORKS
SUB-HEAD CODE 120

S. No.	Description	Unit	Rate in Rs.
63	Providing and fixing solid core 1st class deodar wood veneered flush door shutter 1-1/2 inches (38 mm) thickness with and including the cost of commercial veneer facing of not less than 1 mm thickness on either side, cross band of standard specification with solid fully laminated core, 2 inches (51 mm) wide best quality deodar wood outer faces alround as commercially produced by standard manufacturers under power driven hydraulic press as approved by Engineer-in-charge including iron fittings etc., complete but excluding the cost of handles and locking arrangement.	Sq.ft. Sq.m	1,386.06 14,919.39
64	Providing and fixing 1-1/2 inches (38 mm) thick solid core deodar wood flushed veneered door shutters, with and including the cost of commercial plywood facing 3 mm. thick (3 ply) on both faces, fixed over best quality deodar wood frame 2 inches wide alround 6 inches wide lock rail and 2nd class deodar wood solid core, i/c., 1/4 inch thick best quality deodar wood lipping on all sides as per approved drawing, manufactured under power driven hydraulic press, including the cost of approved iron fittings but excluding the cost of handles and locking arrangement.	Sft. Sq.m.	1,448.56 15,592.14
65	Providing and fixing solid core 1st class veneered flush door shutter 1-1/4 inches (32 mm) thickness with and including the cost of commercial veneer facing of not less than 1 mm thickness on either side, cross band of standard specification, with solid fully laminated core 2 inches (51 mm) wide best quality deodar wood outer faces alround as commercially produced by standard manufacturers under power driven hydraulic press as approved by Engineer-in-charge including iron fittings etc., complete but excluding the cost of handles and locking arrangement..	Sq.ft. Sqm	1,136.06 12,228.42
66	Providing and fixing 1-1/2 inches (38 mm) thick pressed veneered door shutters fully flushed with commercial ply wood veneering on all faces and sides fixed over deodar wood cavitied core and frame work of not less than 4 inches (102 mm) wide strip alround with approved brass hinges and tower bolts etc., as required .	Sq.ft. Sq.ft.	1,695.81 18,253.55
67	Providing and fixing 1-1/2 inches (38 mm) thick pressed veneered door shutters fully flushed with commercial ply wood veneering on one face and sides and hard board (masonite) on other face fixed over deodar wood cavitied core and frame work of not less than 4 inches (102 mm) wide strip alround with approved brass hinges tower as required .	Sq.ft. Sq.m	1,689.27 18,183.09
68	Providing and fixing 1-1/2 inches (38 mm) thick pressed veneered door shutters fully flushed with commercial ply wood veneering on one face 1/2 inch (13 mm) thick deodar wood lipping alround fixed over deodar wood cavitied core and frame work of not less than 4 inches (102 mm) wide strip alround with approved brass hinges tower as required.	Sq.ft. Sq.m	1,749.45 18,830.93

WOOD WORKS

SUB-HEAD CODE 120

S. No.	Description	Unit	Rate in Rs.
	(6) FULLY STRIPED GLAZED SHUTTERS		
69	Providing and fixing 2 inches (51 mm) thick fully striped glazed shutters in best quality imported teak wood with plain glass panes 24 oz. (7.3 kg/SM) approved brass hinges, tower bolts, teak wood beading and putty packing to glasses, as required .	Sq.ft.	3,605.36
		Sq.m	38,807.75
70	Providing and fixing 1-3/4 inches (44 mm) thick fully striped glazed shutters in best quality imported teak wood, with plain glass panes 24 oz. (7.3 kg/SM) approved brass hinges, tower bolts, teak wood beading and putty packing to glasses etc., as required .	Sq.ft.	3,218.61
		Sq.m	34,644.83
71	Providing and fixing 1-1/2 inches (38 mm) thick fully striped glazed shutters in best quality imported teak wood, with plain glass panes 24 oz (7.3 kg/SM) approved brass hinges, tower bolts, teak wood beading and putty packing to glasses etc., as required .	Sq.ft.	2,646.60
		Sq.m	28,487.78
72	Providing and fixing 1-1/4 inches (32 mm) thick fully striped glazed shutters in best quality imported teak wood with plain glass panes 24 oz (7.3 kg/SM) approved iron hinges, tower bolts, deodar wood beading and putty packing to glasses as required .	Sq.ft.	2,319.53
		Sq.m	24,967.16
73	Providing and fixing 2 inches (51 mm) thick fully striped glazed shutters in best quality deodar wood with plain glass panes 24 oz (7.3 kg/SM) with approved iron hinges, tower bolts, deodar wood beading and putty packing to glasses etc., as required .	Sq.ft.	2,164.53
		Sq.m	23,298.75
74	Providing and fixing 1-3/4 inches (44 mm) thick full striped glazed shutters in best quality deodar wood with plain glass panes 24 oz (7.3 kg/SM) with approved iron hinges, tower bolts, deodar wood beading and putty packing to glasses etc., as required .	Sq.ft.	1,898.09
		Sq.m	20,430.84
75	Providing and fixing 1-1/2 inches (38 mm) thick fully striped glazed shutters in best quality deodar wood with plain glass panes 24 oz (7.3 kg/SM) with approved iron hinges, tower botts, deodar wood beading and putty packing to glasses etc., as required .	Sq.ft.	1,575.85
		Sq.m	16,962.29
76	Providing and Fixing 1-1/4 inches (32 mm) thick full striped glazed shutters in best quality deodar wood with plain glass panes 24 oz. (7.3 kg/SM) with approved iron hinges, tower bolts, deodar wood beading and putty packing to glasses etc., as required .	Sq.ft.	1,431.50
		Sq.m	15,408.54
	(7) PARTLY PANELLED AND PARTLY STRIPED GLAZED SHUTTERS		
77	Providing and fixing 2 inches (51 mm) thick partly panelled and partly striped glazed shutters in best quality imported teak wood with plain glass panes 24 oz (7.3 kg/SM) with approved brass hinges, tower bolts, teak wood beading and putty packing to glasses etc., as required.	Sq.ft.	3,720.22
		Sq.m	40,044.08

S. No.	Description	Unit	Rate in Rs.
78	Providing and fixing 1-3/4 inches (44 mm) thick partly panelled and partly striped glazed shutters in best quality imported teak wood with plain glass panes 24 oz (7.3 kg/SM) with approved brass hinges, tower bolts, teak wood beading and putty packing to glasses etc., as required.	Sq.ft. Sq.m	3,387.57 36,463.46
79	Providing and fixing 1-1/2 inches (38 mm) thick partly panelled and partly striped glazed shutters in best quality imported teak wood with plain glass panes 24 oz (7.3 kg/SM) with approved brass hinges, tower bolts, teak wood beading and putty packing to glasses etc., as required.	Sq.ft. Sq.m	3,027.83 32,591.21
80	Providing and fixing 1-1/4 inches (32 mm) thick partly panelled and partly striped glazed shutters in best quality imported teak wood with plain glass panes 24 oz (7.3 kg/SM) with approved brass hinges, tower bolts, teak wood beading and putty packing to glasses etc., as required.	Sq.ft. Sq.m	2,622.02 28,223.18
81	Providing and fixing 2 inches (51 mm) thick partly panelled and partly striped glazed shutters in best quality deodar wood with plain glass panes 24 oz (7.3 kg/SM) with approved iron hinges, tower bolts, deodar wood beading and putty packing to glasses etc., as required.	Sq.ft. Sq.m	2,149.23 23,134.04
82	Providing and fixing 1-3/4 inches (44 mm) thick partly panelled and partly striped glazed shutters in best quality deodar wood with plain glass panes 24 oz (7.3 kg/SM) with approved iron hinges, tower bolts, deodar wood beading and putty packing to glasses etc., as required--	Sq.ft. Sq.m	1,940.27 20,884.92
83	Providing and fixing 1-1/2 inches (38 mm) thick partly panelled and partly striped glazed shutters in best quality deodar wood with plain glass panes 24 oz (7.3 kg/SM) with approved iron hinges, tower bolts, deodar wood beading and putty packing to glasses etc., as required.	Sq.ft. Sq.m	1,770.45 19,056.99
84	Providing and fixing 1-1/4 inches (32 mm) thick partly panelled and partly striped glazed shutters in best quality deodar wood with plain glass panes 24 oz (7.3 kg/SM) with approved iron hinges, tower bolts, deodar wood beading and putty packing to glasses etc., as required.	Sq.ft. Sq.m	1,525.77 16,423.24
	(9) FULLY CLAD SHUTTERS		
85	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood shutters clad fully with hard-board (Masonite) on both faces and sides fixed over deodar wood cavitied core and frame work with approved brass hinges and tower bolts etc., as required.	Sq.ft. Sq.m	1,674.23 18,021.25
86	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood shutters clad fully with masonite on both faces 1/2 inch (13 mm) thick deodar wood lipping on all sides fixed over deodar wood cavitied core and frame work with approved brass hinges, tower bolts etc., as required..	Sq.ft. Sq.m	1,763.16 18,978.49

WOOD WORKS

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S. No.	Description	Unit	Rate in Rs.
87	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood shutters fully clad with anodized striped aluminium sheet on both faces and sides striped and levelled beading of same texture as border over faces, fixed over deodar wood cavitied core and framed work with anodized aluminium hinges, tower bolts etc., as required..	Sq.ft. Sq.m	3,712.83 39,964.58
88	Providing and fixing chip or particle board shutters fully clad with best quality imported teak wood ply on both faces and sides fixed over 1 inch (25 mm) thick chip board having minimum density of 600 kilogram per cubic meter, wrth approved brass hinges, tower bolts etc., as required.	Sq.ft. Sq.m	844.61 9,091.32
89	Providing and fixing chip or particle board shutters fully clad with best quality imported teak wood ply on one face, laminated plastic board on the other face and sides, fixed over 1 inch (25 mm) thick chip board having minimum density of 600 kilogram per cubic meter, with approved brass hinges, tower bolts etc., as required.	Sq.ft. Sq.m	790.31 8,506.85
90	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood shutters fully clad with teak wood ply on one face and hard board (masonite) on other face, 1/2 inch (13 mm) deodar wood lipping on all sides fixed over deodar wood cavitied core and frame work with approved brass hinges, tower bolts, etc., as required.	Sq.ft. Sq.m	1,003.83 10,805.15
91	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood shutters fully clad with plain or embossed aluminium sheet on both faces and sides, fixed over cavitied core and frame work with approved chromium plated brass hinges, tower bolts etc., as required.	Sq.ft. Sq.m	3,545.82 38,166.88
92	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood shutters fully clad with laminated plastic board on both faces and sides, fixed over deodar wood cavitied core and frame work with approved chromium plated brass hinges, tower bolts etc., as required.	Sq.ft. Sq.m	1,222.98 13,164.06
93	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood shutters fully clad with laminated plastic board on one face plain and embossed aluminium sheet on other face and sides fixed over deodar wood cavitied core and frame work with approved chromium plated, brass hinges, tower bolts etc., as required..	Sq.ft. Sq.m	2,471.27 26,600.53
	(10) FULLY GLAZED CLAD SHUTTERS		
94	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood shutters fully glazed with 1/4 inch (6.4 mm) thick plate glass and clad with plain aluminium sheets on all faces and sides fixed over deodar wood frame work including aluminium angles and beading with putty packing alround glazing with approved chromium plated brass hinges, tower bolts etc., as required.	Sq.ft. Sq.m	1,990.26 21,422.95

WOOD WORKS

SUB-HEAD CODE 120

S. No.	Description	Unit	Rate in Rs.
95	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood shutters fully glazed with 1 /4 inch (6.4 mm) thick plate glass and clad with anodised striped aluminium sheets on all faces and sides fixed over deodar wood frame work and striped ;and bevelled beading of same texture over front face anodised aluminium angle at back with putty packing alround the glazing, with approved chromium plated, brass piano hinges and tower bolts, etc., as required.	Sq.ft.	2,019.83
		Sq.m	21,741.24
96	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood shutters fully glazed with 1 /4 inch (6.4 mm) thick plate glass and clad with laminated plastic board on both faces and all sides fixed over deodar wood frame work including aluminium angles and beading with putty packing with approved chromium plated brass hinges and tower bolts etc., as required..	Sq.ft.	1,336.47
		Sq.m	14,385.64
97	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood shutters fully glazed with 1 /4 inch (6.4 mm) thick plate glass and clad with anodised aluminium sheet on front face sides and with plain aluminium sheet at the back face, fixed over deodar wood frame work including aluminium angles and anodised aluminium beading with putty packing with approved chromium plated brass hinges and tower bolts etc., as required..	Sq.ft.	1,727.05
		Sq.m	18,589.79
98	Providing and Fixing 1-1/2 inches (38 mm) thick best quality deodar wood shutters fully glazed with 1/4 inch (6 mm) thick plate glass and clad with laminated plastic board on one face and with plain or embossed aluminium sheet on other face and side, fixed over deodar wood frame work including aluminium angles and beading with putty packing approved chromium plated, brass hinges and tower bolts etc., as required	Sq.ft.	1,713.84
		Sq.m	18,447.59
	(11) FULLY CLAD SLIDING SHUTTERS		
99	Providing and fixing sliding shutters clad with plain galvanized iron sheet 24 gauge (1.0 mm) on front face over pan wood frame work 2 inches x 3 inches (51 mm x 76 mm) pulleys 4 inches (102 mm) dia, with guides of T-iron 2-1/2 inch x 2-1/2 inches x 1/4 inches (64 mm x 64 mm x 6.4 mm) at top and bottom, T-iron brackets to walls and top pulleys 2 inches x 2 inches x 1/4 inch (51 mm x 51 mm x 6.4 mm) covering channels for pulleys embedding in cement concrete 1:2:4 bottom guide with rag bolts 6 inches (152 mm) long including locking arrangement with handles etc., complete as per drawing and instruction of Engineer-in-Charge complete .	Sq.ft.	1,263.09
		Sq.m	13,595.75

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S. No.	Description	Unit	Rate in Rs.
100	Providing and fixing sliding shutters clad with plain galvanized iron sheet 24 gauge (1.00 mm) on front face over deodar wood frame work 2-1/2 inches x 3-1/2 inches (64 mm x 89 mm) pulleys 4 inches (102 mm) dia, with guides of T-iron 2-1/2 inch x 2-1/2 inches x 1/4 inches (64 mm x 64 mm x 6.4 mm) at top and bottom, T-iron brackets to walls and top pulleys 2 inches x 2 inches x 1/4 inch (51 mm x 51 mm x 6.4 mm) covering channels for pulleys embedding in cement concrete 1:2:4 bottom guide with rag bolts 6 inches (152 mm) long including locking arrangement with handles etc., as per drawing and instruction of Engineer-in-Charge complete.	Sq.ft. Sq.m	1,914.98 20,612.65
101	Providing and Fixing 1-1/2 inches (38 mm) thick best quality imported teak wood sliding shutters fully glazed with 1/4 inch (6 mm) thick plate glass including fixing guides rails, brass roller imported teak wood beading with putty packing, cutting and making good damages to walls and floors etc., as required .	Sq.ft. Sq.m	3,056.29 32,897.57
102	Providing and Fixing 1-1/4 inches (32 mm) thick best quality imported teak wood sliding shutters fully glazed with 1/4 inch (6 mm) thick plate glass including fixing guide rails, brass roller imported teak wood fixing guide rails, brass roller imported teak wood beading with putty packing, cutting and making good damages to walls and floors, etc., as required	Sq.ft. Sq.m	2,550.42 27,452.50
103	Providing and fixing 1 inches (25 mm) thick best quality imported teak wood sliding shutters, fully glazed with glass panes 24 Oz, (7.3 Kg./cm) including fixing guide rails, brass roller imported teak wood beading with putty packing, cutting and making good damages to walls and floor, etc., as required..	Sq.ft. Sq.m	1,878.64 20,221.52
104	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood sliding shutters fully glazed with 1/4 inch (6 mm) thick plate glass including fixing guide rails, iron rollers, deodar wood beading with putty packing, cutting and making good damages to walls, floors, etc., as required	Sq.ft. Sq.m	1,891.76 20,362.68
105	Providing and fixing 1-1/4 inch (32 mm) thick best quality deodar wood sliding shutters fully glazed with 1/4 inch (6 mm) thick plate glass including fixing guide rails, iron rollers, deodar wood beading with putty packing.cutting and making good damages to walls, floors, etc., as required.	Sq.ft. Sq.m	1,634.15 17,589.86
106	Providing and fixing one inch (25 mm) thick best quality deodar wood sliding shutters fully glazed with glass panes 24 Oz. (7.3 Kg/Sm.) including fixing guide rails, iron rollers, deodar wood beading with putty packing etc. as required	Sq.ft. Sq.m	1,305.70 14,054.41

S. No.	Description	Unit	Rate in Rs.
	(12) PARTLY PANELLED AND PARTLY GLAZED SLIDING SHUTTERS		
107	Providing and fixing 1-1/2 inches (38 mm) thick best quality imported teak wood sliding shutters partly panelled and partly glazed with 1/4 inch (6.4 mm) thick plate glass including fixing guide rails, brass rollers imported teak wood beading with putty packing cutting and making good damages to walls, floors etc., as required .	Sq.ft.	3,494.21
		Sq.m	37,611.29
108	Providing and fixing 1-1/4 inches (32 mm) thick best quality imported teak wood sliding shutters partly panelled and partly glazed with 1/4 inch (6.4 mm) thick plate glass including fixing guide rails, brass rollers imported teak wood beading, with putty packing cutting and making good damages to walls, floors etc., as required	Sq.ft.	3,207.70
		Sq.m	34,527.31
109	Providing and fixing 1 inch (25 mm) thick best quality imported teak wood sliding shutters partly panelled and partly glazed with glass panes 24 Oz. (7.3 Kg./Sm.) including fixing guide rails, brass rollers imported teak wood beading with putty packing etc., as required .	Sq.ft.	2,680.35
		Sq.m	28,851.07
110	Providing and fixing 1-1/2 inches (38 mm) thick best quality deadar wood sliding shutters partly panelled and partly glazed with 1/4 inch (6.4 mm) thick plate glass including fixing guide rails, iron rollers deodar wood beading with putty packing, cutting and making good damages to wall floors etc., as required	Sq.ft.	2,039.36
		Sq.m	21,951.42
111	Providing and fixing 1-1/4 inches (32 mm) thick best quality deodar wood sliding shutters partly panelled and partly glazed with 1/4 inch (6.4 mm) thick plate glass including fixing guide rails, iron rollers, deodar wood beading with putty packing, cutting and making good damages to walls, floors etc., as required	Sq.ft.	1,910.48
		Sq.m	20,564.21
112	Providing and fixing one inch (25 mm) thick best quality deodar wood sliding shutters partly panelled and partly glazed with glass panes 24 Oz. (7.3 Kg./Sm.) including fixing guide rails, iron rollers, deodar wood beading with packing etc., as required	Sq.ft.	1,673.23
		Sq.m	18,010.49
	(13) FULLY VENEERED SLIDING SHUTTERS		
113	Providing and fixing 1-1/2 inches (38 mm) thick pressed veneered sliding shutters fully flushed with imported teak wood veneering on all faces and sides fixed over deodar wood cavitied core and frame work of not less than four inches (102 mm) wide strip alround including fixing guide rails, brass rollers cutting and making good damages to walls and floors etc., as required .	Sq.ft.	2,288.99
		Sq.m	24,638.43

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S. No.	Description	Unit	Rate in Rs.
114	Providing and fixing 1-1/4 inches (32 mm) thick pressed veneered sliding shutters fully flushed with ply wood veneering on all faces and sides fixed over deodar wood cavitied core and frame work of not less than four inches (102 mm) wide strip alround including fixing guide rails, brass rollers cutting and making good damages to walls and floors etc., as required .	Sq.ft. Sq.m	2,061.09 22,185.39
	(14) PARTLY GLAZED AND PARTLY VENEERED SLIDING SHUTTERS		
115	Providing and fixing 1-1/2 inches (38 mm) pressed veneered sliding shutters partly glazed with glass panes 24 Oz. (7.3 Kg./Sm.) and partly veneered with imported teak wood veneering in all faces and sides, fixed over deodar wood cavitied core and frame work of not less than 4 inches (102 mm) wide strip alround including fixing guide rails, brass rollers, teak wood beading with partly packing to glasses, cutting and making good damages to walls floors but excluding the cost of extra glazing and grills sandwiched between the glasses etc., as required .	Sq.ft. Sq.m	2,105.07 22,658.73
116	Providing and fixing 1-1/2 inches (38 mm) pressed veneered sliding shutters partly glazed with glass panes 24 Oz. (7.3 Kg./Sm.) and partly veneered with commercial ply wood veneering on all faces and sides, fixed over deodar wood cavitied core and frame work of not less than 4 inches (102 mm) wide strip alround including fixing guide rails, brass rollers, teak wood beading with partly packing to glasses, cutting and making good damages to walls floors but excluding the cost of extra glazing and grills sand-wiched between the glasses etc., as required .	Sq.ft. Sq.m	1,918.44 20,649.89
	(15) BATTENED LEDGED AND BRACED SHUTTERS		
117	Providing and fixing 2-1/2 inches or 64 mm thick (1 inch or 25 mm thick batten, 1-1/2 inches or 38 mm thick ledges and bracing) best quality deodar wood shutters battened, ledges and braced, making rebated or tongued and grooved joints with approved T-iron hinges and tower bolts as required.	Sq.ft. Sq.m	1,776.39 19,120.87
118	Providing and fixing 2 inches or 51 mm thick (one inch or 25 mm thick batten and one inch or 25 mm thick ledges and bracing) best quality deodar wood shutters battened, ledged and braced, making rebated or tongued and grooved joints with approved T-iron hinges and tower bolts as required	Sq.ft. Sq.m	1,639.92 17,651.98
119	Providing and fixing 1-3/4 inches or 44 mm thick (3/4 inch or 19 mm thick battens and one inch or 25 mm thick ledges and bracing) best quality deodar wood shutters battened, ledged and braced, making rebated or tongued and grooved joints with approved T-iron hinges and tower bolts as required .	Sq.ft. Sq.m	1,377.00 14,821.86

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S. No.	Description	Unit	Rate in Rs.
120	Providing and fixing 1-1/2 inches or 38 mm thick (3/4 inch or 19 mm thick battens 3/4 inch or 19 mm thick ledges and baacing) best quality deodar wood shutters battened, ledged and braced, making rebated or tongued and grooved joints with approved T-iron hinges and tower bolts as required	Sq.ft.	1,082.58
		Sq.m	11,652.76
	(16) FULLY IRON BARRED SHUTTERS		
121	Providing and fixing 1-3/4 inches (44 mm) thick best quality deodar wood shutters fully fitted with iron bars 5/8" (16 mm) dia at 4 inches (102 mm) centre to centre including cost of iron bars, approved iron hinges, tower bolts, etc., as required .	Sq.ft.	1,752.99
		Sq.m	18,869.03
122	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood shutters fully fitted with iron bars 5/8" (16 mm) dia at 4 inches (102 mm) centre to centre including cost of iron bars, approved iron hinges, tower bolts, etc., as required .	Sq.ft.	1,569.86
		Sq.m	16,897.81
123	Providing and fixing 1-1/4 inches (32 mm) thick best quality deadar wood shutters fully fitted with iron bars 1/2" (13 mm) dia at 4 inches (102 mm) centre to centre including cost of iron bars, approved iron hinges, tower bolts, etc., as required .	Sq.ft.	1,305.76
		Sq.m	14,055.12
	(17) FULLY WIRE GAUZE SHUTTERS		
124	Providing and fixing 1-3/4 inches (44 mm) thick best quality imported teak wood shutters fully wire gazed with brass wire gauze of 24 gauge and 12 mesh to an inch (25 mm) with approved brass butt hinges, spring hinges, tower bolts etc., as required .	Sq.ft.	3,523.48
		Sq.m	37,926.37
125	Providing and fixing 1-1/2 inches (38 mm) thick best quality imported teak wood shutters fully wire gazed with brass wire gauze of 24 gauge and 12 mesh to an inch (25 mm) with approved brass butt hinges, spring hinges, tower bolts etc., as required .	Sq.ft.	3,203.69
		Sq.m	34,484.20
126	Providing and fixing 1-1/4 inches (32 mm) thick best quality imported teak wood shutters fully wire gazed with brass wire gauze of 24 gauge and 12 mesh to an inch (25 mm) with approved brass butt hinges, spring hinges, tower bolts etc., as required .	Sq.ft.	2,832.96
		Sq.m	30,493.67
127	Providing and fixing one inches (25 mm) thick best quality imported teak wood shutters fully wire gauzed with brass wire gauze of 24 gauge and 12 mesh to an inch (25 mm) with approved brass butt hinges, spring hinges, tower bolts etc., as required .	Sq.ft.	2,528.74
		Sq.m	27,219.11
128	Providing and fixing 1-3/4 inches (44 mm) thick best quality deodar wood shutters fully wire gauzed with galvanized iron wire gauze of 24 gauge and 12 mesh to an inch (25 mm) with approved iron butt hinges, spring hinges, tower bolts etc., as required .	Sq.ft.	1,629.69
		Sq.m	17,541.86

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S. No.	Description	Unit	Rate in Rs.
129	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood wire gauze shutters fully wire gauzed with galvanized iron wire gauze of 24 gauge and 12 mesh to an inch (25 mm) with approved iron butt hinges, spring hinges, tower bolts etc., as required .	Sq.ft. Sq.m	1,438.93 15,488.51
130	Providing and fixing 1-1/4 inches (32 mm) thick best quality deodar wood wire gauze shutters fully wire gauzed with galvanized iron wire gauze of 24 gauze and 12 mesh to an inch (25 mm) with approved iron butt hinges, spring hinges and tower bolts etc., as required .	Sq.ft. Sq.m	1,244.07 13,391.01
131	Providing and fixing one inch (25 mm) thick best quality deodar wood wire gauze shutters fully wire gauzed with galvanized iron wire gauze or 24 gauge and 12 mesh to one inch (25 mm) with approved iron butt hinge, spring hinges and tower bolts etc., as required .	Sq.ft. Sq.m	1,053.30 11,337.66
	(18) PARTLY WIRE GAUZED AND PARTLY PANELLED SHUTTERS		
132	Providing and fixing 1-3/4 inches (44 mm) thick best quality imported teak wood shutters partly wire gauzed with brass wire gauze of 24 gauge and 12 mesh to an inch (25 mm) and partly panelled with imported teak wood approved brass butt hinges spring hinges and tower bolts etc., as required.	Sq.ft. Sq.m	3,464.98 37,296.70
133	Providing and fixing 1-1/2 inches (38 mm) thick best quality imported teak wood shutters partly wire gauzed with brass wire gauze of 24 gauge and 12 mesh to and inch(25 mm) and partly panelled with imported teak wood, approved brass butt hinges, spring hinges and tower botts, etc., as required	Sq.ft. Sq.m	3,160.76 34,022.14
134	Providing and fixing 1-1/4 inches (32 mm) thick best quality imported teak wood shutters partly wire gauzed with brass wire gauze of 24 gauge and 12 mesh to an inch (25 mm) and partly panelled with imported teak wood, approved brass butt hinges, spring hinges and tower bolts etc., as required	Sq.ft. Sq.m	2,797.27 30,109.58
135	Providing and fixing one inch (25 mm) thick best quality imported teak wood shutters partly wire gauzed with brass wire gauze of 24 gauge and 12 mesh to an inch (25 mm) and partly panelled with imported teak wood, approved brass butt hinges, spring hinges and tower bolts etc., as required	Sq.ft. Sq.m	2,493.06 26,832.78
136	Providing and fixing 1-3/4 inches (44 mm) thick best quality deodar wood shutters partly wire gauzed with galvanized iron wire gauze of 24 gauge and 12 mesh to an inch (25 mm) and partly panelled with deodar wood, approved iron butt hinges, spring hinges and tower bolts etc., as required	Sq.ft. Sq.m	1,774.74 19,103.16
137	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood shutters partly wire gauzed with galvanized iron wire gauze of 24 gauge and 12 mesh to an inch (25 mm) and partly panelled with deodar wood approved iron, butt hinges, spring hinges and tower bolts etc., as required	Sq.ft. Sq.m	1,583.62 17,045.92

S. No.	Description	Unit	Rate in Rs.
138	Providing and fixing 1-1/4 inches (32 mm) thick best quality deodar wood shutters partly wire gauzed with galvanized iron wire gauze of 24 gauge and 12 mesh to an inch (25 mm) and partly panelled with deodar wood approved iron, butt hinges, spring hinges and tower bolts *etc.*, as required	Sq.ft. Sq.m	1,389.59 14,957.44
139	Providing and fixing one inch (25 mm) thick best quality deodar wood shutters partly wire gauzed with galvanized iron wire gauze of 24 gauze and 12 mesh to an inch (25 mm) and partly panelled with deodar wood approved iron butt hinges, spring hinges and tower bolts etc., as required	Sq.ft. Sq.m	1,197.99 12,895.07
	(19) FULLY EXPANDED METAL SHUTTERS		
140	Providing and fixing 1-3/4 inches (44 mm) thick best quality deodar wood shutters fully fixed with expanded metal of 3/4 inch x 2-1/2 inches (19 mm x 64 mm) mesh 12 gauge with approved iron hinges and tower bolts etc., as required.	Sq.ft. Sq.m	1,545.96 16,640.55
141	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood shutters fully fixed with expanded metal of 3/4 inch x 2-1/2 inches (19 mm x 64 mm) mesh 12 gauge with approved iron hinges and tower bolts etc., as required.	Sq.ft. Sq.m	1,355.20 14,587.19
142	Providing and fixing 1-1/4 inches (32 mm) thick best quality deodar wood shutters fully fixed with expanded metal 3/4 inch x 2-1/2 inches (19 mm x 64 mm) mesh 12 gauge with approved iron hinges and tower bolts etc., as required..	Sq.ft. Sq.m	1,164.57 12,535.36
143	Providing and fixing one inch (25 mm) thick best quality deodar wood shutters fully fixed with expanded metal of 3/4 inch x 2-1/2 inches (19 mm x 64 mm) mesh 12 gauge with approved iron hinges and tower bolts etc., as required	Sq.ft. Sq.m	973.81 10,482.00
	(20) STAIR CASE GLAZING		
144	Providing and fixing 1-3/4 inches (44 mm) thick best quality imported teak wood stair case fixed glazing, with glass panes 24 Oz. (7.34 Kg./Sm.) imported teak wood beading and putty packing etc., as required .	Sq.ft. Sq.m	1,403.28 15,104.75
145	Providing and fixing 1-1/2 inches (38 mm) thick best quality imported teak wood stair case fixed glazing, with glass panes 24 Oz. (7.34 Kg./Sm.) imported teak wood beading and putty packing etc., as required .	Sq.ft. Sq.m	1,359.73 14,635.98
146	Providing and fixing 1-1/4 inches(32 mm) thick best quality imported teak wood stair case fixed glazing, with glass panes 24 Oz. (7.34 Kg./Sm.) imported teak wood beading and putty packing etc., as required	Sq.ft. Sq.m	1,072.82 11,547.73
147	Providing and fixing 1-3/4 inch (44 mm) thick best quality deodar wood stair case fixed glazing, with glass panes 24 Oz. (7.34 Kg./Sm.) deodar wood beading and putty packing etc., as required .	Sq.ft. Sq.m	885.67 9,533.25

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S. No.	Description	Unit	Rate in Rs.
148	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood stair case fixed glazing with glass panes 24 Oz. (7.34 Kg./Sm.) deodar wood beading and putty packing etc., as required .	Sq.ft. Sq.m	846.75 9,113.53
149	Providing and fixing 1-1/4 inches (32 mm) thick best quality deodar wood stair case fixed glazing with glass panes 24 Oz. (7.34 Kg./Sm.) deodar wood beading and putty packing etc., as required .	Sq.ft. Sq.m	723.82 7,791.12
	(21) FULLY PANELLED SWING SHUTTERS		
150	Providing and fixing 1-1/2 inches (38 mm) thick best quality imported teak wood swing shutters fully panelled with same Wood, with brass helical spring hinges etc., as required ..	Sq.ft. Sq.m	3,169.22 34,113.19
151	Providing and fixing 1-1/4 inches (32 mm) thick best quality imported teak wood swing shutters fully panelled with same wood, with brass helical spring hinges etc., as required,...	Sq.ft. Sq.m	2,903.75 31,255.68
152	Providing and fixing one inch (25 mm) best quality imported teak wood swing shutters fully panelled with same wood with brass helical spring hinges etc., as required ...	Sq.ft. Sq.m	2,541.15 27,352.69
153	Providing and fixing 1-1/2 inches (38 mm) thick best quality imported teak wood swing shutters panelled with 5/16 inch (7.9 mm) thick hard board (masonite) with brass helical spring hinges as required .	Sq.ft. Sq.m	2,521.60 27,142.28
154	Providing and fixing 1-1/4 inches (32 mm) thick best quality imported teak wood swing shutters panelled with 5/16 inch (7.9 mm) thick hard board (masonite) with brass helical spring hinges as required .	Sq.ft. Sq.m	2,292.20 24,673.04
155	Providing and fixing one inch (25 mm) thick best quality imported teak wood swing shutters panelled with 5/16 (7.9 mm) thick hard board (masonite) with brass helical spring hinges etc., as required .	Sq.ft. Sq.m	2,071.92 22,301.99
156	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood swing shutters fully panelled with same wood, with iron helical spring hinges etc. as required .	Sq.ft. Sq.m	1,594.79 17,166.18
157	Providing and fixing 1-1/4 inches (32 mm) thick best quality deodar wood swing shutters fully panelled with same wood, with iron helical spring hinges etc. as required	Sq.ft. Sq.m	1,465.86 15,778.40
158	Providing and fixing 1 inch (25 mm) thick best quality deodar wood swing shutters fully panelled with same wood, with iron helical spring hinges etc. as required	Sq.ft. Sq.m	1,248.72 13,441.13
159	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood swing shutters panelled with 5/16 inch (7.9 mm) thick hard board (masonite) with iron helical spring hinges etc. as required.	Sq.ft. Sq.m	1,240.27 13,350.11

WOOD WORKS

SUB-HEAD CODE 120

S. No.	Description	Unit	Rate in Rs.
160	Providing and fixing 1-1/4 inches (32 mm) thick best quality deodar wood swing shutters panelled with 5/16 inch (7.9 mm) thick hard board (masonite) with iron helical spring hinges etc.as required..	Sq.ft. Sq.m	1,080.93 11,635.02
161	Providing and fixing 1 inch (25 mm) thick best quality deodar wood swing shutters panelled with 5/16 inch (7.9 mm) thick hard board (masonite) with iron helical spring hinges etc. as required.	Sq.ft. Sq.m	962.41 10,359.34
	(22) FULLY GLAZED SWING SHUTTERS		
162	Providing and fixing 1-1/2 inches (38 mm) thick best quality imported teak wood swing shutters fully glazed with glass panes 24 Oz. (7.34 Kg/Ms.) teak wood beading with putty packing to glasses with brass helical spring hinges etc., as required .	Sq.ft. Sq.m	2,686.96 28,922.17
163	Providing and fixing 1-1/4 inch (32 mm) thick best quality imported teak wood swing shutters fully glazed with glass panes 24 Oz. (7.34 Kg./Sm.) teak wood beading with putty packing to glasses, with brass helical spring hinges as required .	Sq.ft. Sq.m	2,469.35 26,579.79
164	Providing and fixing one inches (25 mm) thick best quality imported teak wood swing shutters fully glazed with glass panes 24 Oz. (7.34 Kg./Sm.) teak wood beading with putty packing to glasses, with brass helical spring hinges etc., as required .	Sq.ft. Sq.m	2,162.74 23,279.50
165	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood swing shutters fully glazed with gasses panes 24 Oz. (7.34 Kg./Sm.) deodar wood beading with putty packing to glasses with iron helical spring hinges etc., as required .	Sq.ft. Sq.m	1,332.11 14,338.73
166	Providing and fixing 1-1/4 inches (32 mm) thick best quality deodar wood swing shutters fully glazed with glasses panes 24 Oz. (7.34 Kg./Sm.) deodar wood beading with putty packing to glasses with iron helical spring hinges etc., as required .	Sq.ft. Sq.m	1,244.49 13,395.60
167	Providing and fixing 1 inches (25 mm) thick best quality deodar wood swing shutters fully glazed with glasses panes 24 Oz. (7.34 Kg./Sm.) deodar wood beading with putty packing to glasses with iron helical spring hinges etc., as required	Sq.ft. Sq.m	1,059.26 11,401.72
	(23) FULLY VENEERED SWING SHUTTERS		
168	Providing and fixing 1-1/2 inches (38 mm) thick pressed veneered swing shutters fully flushed with imported teak wood veneering on all faces and sides fixed over deodar wood cavitied core and frame work of not less than 4 inches (102 mm) wide strip alround with brass helical spring hinges etc., as required .	Sq.ft. Sq.m	3,538.47 38,087.74

WOOD WORKS
SUB-HEAD CODE 120

S. No.	Description	Unit	Rate in Rs.
169	Providing and fixing 1-1/4 inches (32 mm) thick pressed veneered swing shutters fully flushed with imported teak wood veneering on all faces and sides fixed over deodar wood cavitied core and frame work of not less than 4 inches (102 mm) wide strip alround with brass helical spring hinges etc., as required .	Sq.ft. Sq.m	3,267.04 35,166.11
170	Providing and fixing one inch (25 mm) thick pressed veneered swing shutters fully flushes with imported teak wood veneering on all faces and sides fixed over deodar wood cavitied core and frame works of not less than 4 inches (102 mm) wide strip alround with brass helical spring hinges etc., as required .	Sq.ft. Sq.m	2,868.21 30,873.13
	(24) PVC / UPVC DOOR SHUTTERS		
171	P/F 1-1/2 inch (38mm) thick best quality PVC / UPVC door shutter panelled (approved design), approved iron hinges and tower bolts, etc as required.		2,042.59 21,986.24
	(25) TRELLIS WORK JAFRI		
172	Providing and fixing best quality deodar wood trellis work (Jafri) with 3/8 inch x 1-1/2 inches (9.5 mm x 38 mm) battens forming apertures 1-1/2 inches x 1-1/2 inches (38 mm x 38 mm) but excluding cost of frame work etc., as required ..	Sq.ft. Sq.m	505.56 5,441.85
173	Providing and fixing best quality deodar wood trellis work (Jafri) with 1/2 inch x 1-1/2 inches (13 mm x 38 mm) battens forming apertures 1-1/2 inches x 1-1/2 inches (38 mm x 38 mm) but excluding cost of frame work etc., as required ..	Sq.ft. Sq.m	556.03 5,985.02
	(26) FULLY PANELLED PARTITIONS		
174	Providing and fixing 2 inches (51 mm) thick best quality imported teak wood partition fully panelled with same wood etc., as required	Sq.ft. Sq.m	2,992.02 32,205.80
175	Providing and fixing 1-3/4 inches (44 mm) thick best quality imported teak wood partition fully panelled with same wood etc., as required.	Sq.ft. Sq.m	2,671.13 28,751.82
176	Providing and fixing 1-1/2 inches (38 mm) thick best quality imported teak wood partition fully panelled with same wood as required.	Sq.ft. Sq.m	2,319.38 24,965.62
177	Providing and fixing 1-1/4 inches (32 mm) thick best quality imported teak wood partition fully panelled with same wood as required .	Sq.ft. Sq.m	1,998.02 21,506.52
178	Providing and fixing 2 inches (51 mm) thick best quality deodar wood partition fully panelled with same wood etc, required .	Sq.ft. Sq.m	1,730.68 18,628.84
179	Providing and fixing 1-3/4 inches (44 mm) thick best quality deodar wood partition fully panelled with same wood etc. as required .	Sq.ft. Sq.m	1,543.65 16,615.69

S. No.	Description	Unit	Rate in Rs.
180	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood partition fully panelled with same wood etc. as required .	Sq.ft.	1,348.38
		Sq.m	14,513.80
181	Providing and fixing 1-1/4 inches (32 mm) thick best quality deodar wood partition fully panelled with same wood etc.,as required .	Sq.ft.	1,153.19
		Sq.m	12,412.87
	(27) FULLY GLAZED PARTITIONS		
182	Providing and fixing 2 inches (51 mm) thick best quality Imported teak wood partition fully glazed with glass panes of 24 oz. (7.34 kg./SM.) teak wood beading with putty packing to glasses etc., as required .	Sq.ft.	1,772.05
		Sq.m	19,074.21
183	Providing and fixing 1-3/4 inches (44 mm) thick best qualrty imported teak wood partition fully glazed with glass panes of 24 oz. (7.34 kg./SM.) teak wood beading with putty packing to glasses etc., as required .	Sq.ft.	1,569.07
		Sq.m	16,889.33
184	Providing and fixing 1-1/2 inches (38 mm) thick best quality imported teak wood partition fully glazed with glass panes of 24 oz, (7.34 kg./SM.) teak wood beading with putty packing to glasses etc., as required .	Sq.ft.	1,375.80
		Sq.m	14,808.97
185	Providing and fixing 1-1/4 inches (32 mm) thick best quality imported teak wood partition fully glazed wrth glass panes of 24 oz. (7.34 kg./SM.) teak wood beading with putty packing to glasses etc., as required .	Sq.ft.	1,206.97
		Sq.m	12,991.69
186	Providing and fixing 2 inches (51 mm) thick best quality deodar wood partition fully glazed with glass panes 24 oz. (7.34 kg./SM.) deodar wood beading with putty packing to glasses etc., as required.	Sq.ft.	1,091.10
		Sq.m	11,744.53
187	Providing and fixing 1-3/4 inches (44 mm) thick best quality deodar wood partition fully glazed with glass panes of 24 oz. (7.34 kg./SM.) deodar wood beading with putty packing to glasses etc., as required .	Sq.ft.	997.97
		Sq.m	10,742.09
188	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood partition fully glazed with glass panes 24 oz. (7.34 kg/SM.) deodar wood beading with putty packing to glasses etc., as required.	Sq.ft.	897.47
		Sq.m	9,660.28
189	Providing and fixing 1-1/4 inches (32 mm) thick best quality deodar wood partition fully glazed with glass panes 24 oz., (7.34 kg/SM.} deodar wood beading with putty packing to glasses etc., as required .	Sq.ft.	795.60
		Sq.m	8,563.80
	(28) FULLY FLUSHED PARTITION		
190	Providing and fixing wooden partition fully flushed with hard board (masonite) on one face fixed on best quality deodar wood frame 3" x 1-3/4" (76 mm x 44 mm) at spacing not exceeding 24 inches (610 mm) horizontal x 18 inches (457 mm) vertical including necessry wooden beading etc,, as required .	Sq.ft.	852.28
		Sq.m	9,173.88

WOOD WORKS
SUB-HEAD CODE 120

S. No.	Description	Unit	Rate in Rs.
191	Providing and fixing wooden partition fully flushed with hard board (masonite) on one face fixed on best quality deodar wood frame 3" x I-I/2" (76 mm x 38 mm) at spacing not exceeding 24 inches (610 mm) horizontal x 18 inches (457 mm) vertical including necessary wooden beading etc., as required .	Sq.ft. Sq.m	770.39 8,292.36
192	Providing and fixing wooden partition fully flushed with hard board (masonite) on one face fixed on best quality deodar wood frame 3" x I-1/4" (76 mm x 32 mm) at spacing not exceeding 24 inches (610 mm) horizontal x 18 inches (457 mm) vertical including necessary wooden beading etc., as required .	Sq.ft. Sq.m	677.00 7,287.19
193	Providing and fixing wooden partition fulfy flushed with hard board (masonite) on both face and side fixed on second quality deodar wood frame 3" x 1-3/4" (76 mm x 44 mm) at spacing not exceeding 24 inches (610 mm) horizontal x 18 inches (457 mm) vertical including necessary wooden beading etc., as required .	Sq.ft. Sq.m	804.97 8,664.58
194	Providing and fixing wooden partition fully flushed with hard board { masonite) on both face and side fixed on second quality deodar wood frame 3" x 1-1/2" (76 mm x 38 mm) at spacing not exceeding 24 inches (610 mm) horizontal x 18 inches (457 mm) vertical including necessary wooden beading etc., as required .	Sq.ft. Sq.m	736.81 7,930.90
195	Providing and fixing wooden partition fully flushed with hard board (masonite) on both face and side fixed on second quality deodar wood frame 3" x 1-1/4" (76 mm x 32 mm) at spacing not exceeding 24 inches (610 mm) horizontal x 18 inches (457 mm) vertical including necessary wooden beading etc., as required .	Sq.ft. Sq.m	649.11 6,987.00
196	Providing and fixing 3/4" thick laminated board partion of approved pattern with aluminum "U" in vertical/Horizontal on the exixting frame work as per direction of the Engineer incharge.	Sft Sqm	194.91 2,097.97
197	Providing and fixing 3/4" thick Lasani board partition of approved pattern and beading for joint on the existing frame work as per direction of the engineer incharge.	Sft Sqm	197.31 2,123.80
198	Providing and fixing 1/2" thick Lasani board partition of approved pattern and beading for joint on the existing frame work as per direction of the Engineer incharge.	Sft Sqm	602.27 6,482.82
	(29) GARAGE AND GODOWN SHUTTERS		
199	Providing and fixing 2-1/2 inches (64 mm) thick best quality deodar wood shutters framed, braced and flushed with plain G.I- sheet 24 gauge for garage etc.including cost of male and female hinges, locking arrangement and other iron fittings, cutting walls and making good the same as required.	Sq.ft. Sq.m	1,194.22 12,854.51

WOOD WORKS

SUB-HEAD CODE 120

S. No.	Description	Unit	Rate in Rs.
200	Providing and fixing 2 inches (51 mm) thick best quality deodar wood shutters framed, braced and flushed with plain G.I. sheet 24 gauge for garage etc., including cost of male and female hinges, locking arrangement and other iron fittings, cutting walls and making good the same as required .	Sq.ft. Sq.m	932.75 10,040.02
201	Providing and fixing 1-3/4 inches (44 mm) thick best quality deodar wood shutters framed, braced and flushed with plain G.I- sheet 24 gauge for garage etc., including cost of male and female hinges, locking arrangements and other iron fittings, cutting walls and making good the same as required .	Sq.ft. Sq.m	790.14 8,504.96
202	Providing and fixing 2-1/2 inches (64 mm) thick best quality deodar wood fully panelled shutters of garage etc., including cost of male and female hinges, locking arrangements and other iron fittings, cutting walls and making good the same as required.	Sq.ft. Sq.m	1,885.91 20,299.72
203	Providing and fixing 2 inches (51 mm) thick best quality deodar wood fully panelled shutters for garage etc.. including cost of male and female hinges, locking arrangements and other iron fittings, cutting walls and making good the same as required.	Sq.ft. Sq.m	1,660.20 17,870.23
204	Providing and fixing 1-3/4 inches (44 mm) thick best quality deodar wood fully panelled shutters for garage etc., incluidng cost of male and female hinges, locking arrangement and other iron fittings, cutting walls and making good the same as required.	Sq.ft. Sq.m	1,470.09 15,823.88
	(30) GATES		
205	Providing and fixing best quality deodar wood gate as per design with necessary iron male and female hinges, stopper, locking arrangements, cutting walls and making good the same as required .	Cft. Cum.	10,863.34 383,635.46
206	Providing and fixing best quality sal ballies gates as per design with necessary iron male and female hinges, stopper, locking arrangement, cutting walls and making good the same as required .	Cft. Cum.	1,292.32 45,637.73
	(31) BOARDING. PANELLING. SKIRTING AND PLANKING		
207	Providing and fixing 3/4 inch (19 mm) thick best quality imported teak wood tongued and grooved boarding, or lining on walls, jambs and skirting etc.,fixed on deodar wood framed backing with rawal plug,screws etc., but excluding cost of backing, polishing etc., as required ..	Sq.ft. Sq.m	1,727.73 18,597.11
208	Providing and fixing 3/4 inch (19 mm) thick best quality imported teak wood boarding or lining in pattern with boarding or moulding of approved design on walls, jambs skirting etc., fixed on deodar wood framed backing with rawal plugs screws etc., but excluding the cost of backing polishing etc., as required .	Sq.ft. Sq.m	1,911.67 20,577.00

WOOD WORKS

SUB-HEAD CODE 120

S. No.	Description	Unit	Rate in Rs.
209	Providing and fixing 1/2 inch (13 mm) thick best quality imported teak wood panelling in frame work of 3" x 1-1 /2" (76 mm x 38 mm) of same wood on walls, jambs, skirting etc., fixed on framed deodar wood backing with rawal plugs, screws etc., but excluding the cost of backing, polishing etc., as required .	Sq.ft. Sq.m	1,608.11 17,309.56
210	Providing and fixing 1/2 inch (13 mm) thick best quality imported teak wood lining on walls, jambs skirting etc., with raised panels and bolection moulding, fixed on deodar wood framed backing with rawal, plugs, screws etc., but excluding the cost of backing polishing etc., as required	Sq.ft. Sq.m	1,938.16 20,862.19
211	Providing and fixing 3/4 inch (19 mm) thick best quality imported teak wood panelling or lining in pattern without beading or moulding on walls, jambs skirting etc., fixed on deodar wood framed backing with rawal plugs screws etc., but excluding cost of backing, polishing etc., as required	Sq.ft. Sq.m	1,742.73 18,758.61
212	Providing and fixing laminated plastic board lining on walls, Jambs, skirting etc., on deodar wood frame backing with rawal plugs, screws etc., but excluding the cost of backing etc., as required .	Sq.ft. Sq.m	244.01 2,626.47
213	Providing and fixing PVC hard sheet wall panelling or lining **(plain)** on walls, Jambs, skirting etc., on wooden backing but excluding the cost of backing etc., as required .	Sq.ft. Sq.m	322.32 3,469.42
214	Providing and fixing PVC hard sheet wall panelling or lining (Printed) on walls, Jambs, skirting etc., on wooden backing but excluding the cost of backing etc., as required .	Sq.ft. Sq.m	355.13 3,822.61
215	Providing and fixing laminated plastic board with aluminium strips of required section in approved pattern on walls jambs skirting etc., fixed on deodar wood framed backing with rawal plugs, screws excluding cost of backing etc., as required .	Sq.ft. Sq.m	316.02 3,401.56
216	Providing and fixing laminated plastic board with aluminium strips of required section in approved pattern in cornice and chair rails etc., fixed on deodar wood backing with rawal plugs, screws etc., but excluding cost of backing etc.. as required .	Sq.ft. Sq.m	371.65 4,000.37
217	Providing and fixing 1/4 inch (6.4 mm) thick best quality imported teak wood tongued and groved plain boarding or lining in cornice and chairs rails etc., fixed on deodar wood backing with rawal plug and screws etc., but excluding cost of backing and polishing etc., as required .	Sq.ft. Sq.m	1,226.58 13,202.79
218	Providing and fixing 3/4 inch (19 mm) thick best quality teak wood tongued and grooved plain boarding or lining in archivolt etc., fixed on deodar wood backing with rawal plug and screws etc., but excluding the cost of backing and polishing etc., as required .	Sq.ft. Sq.m	1,510.35 16,257.29
219	Providing and fixing laminated plastic board lining in archivolt etc., fixed on deodar wood backing with rawal plug and screws etc., but excluding the cost of backing and polishing etc., as required.	Sq.ft. Sq.m	813.28 8,754.01

WOOD WORKS
SUB-HEAD CODE 120

S. No.	Description	Unit	Rate in Rs.
220	Providing and fixing deodar wood framed backing of approved shape and section, in wall panelling or lining skirting cornice, archivolt or chair rails etc., fixed with screws and rawal plug etc., as required .	Per Cft. Per Cum.	9,632.88 103,687.34
	(32) SHELVES		
221	Providing and-fixing 1-1/2 inches (38 mm) thick best quality deodar wood planking in shelves or almirams with or without deodar wood battens 1" x 1-1/2" (25 mm x 38 mm) fixed in walls with screws and rawal plug etc., as required .	Sq.ft. Sq.m	1,563.63 16,830.71
222	Providing and fixing 1-1/4 inch (32 mm) thick best quality deodar wood planking in shelves or almirahs with or without deodar wood battens 1" x 1 -1 /2" (25 mm x 38 mm) fixed in walls with screws and rawal plugs etc., as required.	Sq.ft. Sq.m	1,349.99 14,531.18
223	Providing and fixing one inch (25 mm) thick best quality deodar wood planking in shelves or almirahs with or without deodar wood battens 1" x 1 -1 /2" (25 mm x 38 mm) fixed in walis with screws and rawa! plugs etc., as required.	Sq.ft. Sq.m	1,112.37 11,973.47
224	Providing and fixing 3/4 inch (19 mm) thick best quality deodar wood planking in shelves or almirahs with or without deodar wood battens 1" x 1 -1 /2" (25 mm x 38 mm) fixed in walls with screws and rawal plugs etc., as required .	Sq.ft. Sq.m	901.79 9,706.77
225	Providing and fixing 1-1/2 inches (38 mm) thick best quality deodar wood planking in shelves on deodar wood brackets each having cross sectional area approximately 4 square inches (26 Sq. M.) and spaced at 4 feet (1.2 M.) centre to center fixed to walls with screws and rawal plugs etc., as required .	Sq.ft. Sq.m	1,784.13 19,204.19
226	Providing and fixing 1-1/4 inches (32 mm) thick best quality deodar wood planking in shelves on deodar wood brackets each having cross sectional area approximately 4 square inches (26 SqM.) and spaced at 4 feet (1.2 m) centre to centre fixed to walls with screws and rawal plugs etc., as required.	Sq.ft. Sq.m	1,546.35 16,644.74
227	Providing and fixing one inch (25 mm) thick best quality deodar wood planking in shelves on deodar wood brackets each having cross sectional area approximately 4 square inches (26 SqM.) and spaced at 4 feet (0.9 m) centre to centre fixed to walls with screws and rawal plugs etc., as required .	Sq.ft. Sq.m	1,332.83 14,346.40
228	Providing and fixing 3/4 inch (19 mm) thick best quality deodar wood planking in shelves on deodar wood brackets each having cross sectional area approximately 4 square inches (2G SqM.) and spaced at 3 feet (0.9 m) centre to centre fixed lo walls with screws and rawal plugs etc., as required.	Sq.ft. Sq.m	1,064.42 11,457.31

WOOD WORKS
SUB-HEAD CODE 120

S. No.	Description	Unit	Rate in Rs.
	(33) GAUZING		
229	Providing and fixing brass wire gauze of 24 gauge and 144 mesh per square inch (6.45 S.Cm.) with best quality imported teak wood beading up to one square inch (6.45 SqM.) section of approved design with brass screws over existing frame etc., as required .	Sq.ft. Sq.m	1,454.15 15,652.34
230	Providing and fixing G.I. wire gauze of 24 gauge and 144 mesh per square inch (6.45 SqM.) with best quality deodar wood beading upto one square inch or 6.45 Scm. in section of approved design with iron screws over existing frame etc., as required .	Sq.ft. Sq.m	262.68 2,827.48
231	Providing and fixing chicken netting of approved quality and mesh with best quality deodar.wood beading up to one square inch (6.45 SqM.) in section of approved design with iron screws over existing frame etc., as required .	Sq.ft. Sq.m	168.88 1,817.81
232	Providing and fixing expanded metal 3/4" x 2-1/2" (19 mm x 64 mm) mesh 12 gauge of approved quality with best imported, teak wood beading upto one square inch (6,45 SqM.) in section of approved design with iron screws over existing frame etc., as required .	Sq.ft. Sq.m	297.32 3,200.30
233	Providing and fixing expanded metal 3/4" x 2-1/2" (19 mm x 64 mm) mesh 12 gauge of approved quality with best, deodar wood beading up-to one square inch (6.45 SqM.) in section of approved design with iron screws ove existing frame etc., as required .	Sq.ft. Sq.m	224.24 2,413.75
	(34) MOULDING ARCHITRAVE AND HAND RAIL		
234	Providing and fixing on frames etc., with sunken iron screws best quality imported teak wood moulding, beading architrave etc., of approved design up-to one square inch (6.45 SqM.) in cross sections as required .	Rft. Ru.m.	309.23 1,014.55
235	Providing and fixing on frames etc., with sunken iron screws best quality imported teak wood moulding beading, architrave etc., of approved design over one square inch (6.45 Sqm.) up to 2 square inches (13 Sqm.) in cross section as required .	Rft. Ru.m.	402.29 1,319.85
236	Providing and fixing on frames etc., with sunken iron screws best quality deodar wood moulding beading, architrave etc., of approved design up-to one square inch (6.45 Sqm) in cross section as required .	Rft. Ru.m.	193.35 634.37
237	Providing and fixing on frames etc., with sunken iron screws best quality deodar wood moulding, beading, architrave etc., of approved design over one square inch (6.45 Sqm.) and up-to 2 square inches (13 Sqm.) in cross section as required .	Rft. Ru.m.	268.99 882.51
238	Providing and fixing with sunken iron screws over existing base of iron or wood best quality imported teak wood moulding as hand rails, stud, lath etc., of approved design 3 to 4 square inches (19.4 to 26 Sqm.) in cross section as required.	Rft. Ru.m.	908.36 2,980.20

S. No.	Description	Unit	Rate in Rs.
239	Providing and fixing with sunken iron screws over existing base of iron or wood best quality imported teak wood moulding as hand rails, stud lath etc. of approved design over 4 and upto 6 square inches (26 Sqm - 39 Sqm.) in cross section as required .	Rft. Ru.m.	1,329.28 4,361.16
240	Providing and fixing with sunken iron screws over existing base of iron or wood best quality imported teak wood moulding as hand rails, stud, lath etc., of approved design over 6 and upto 8 square inches (26 and upto 39 Sqm.) to cross section as required .	Rft. Ru.m.	1,764.73 5,789.79
241	Providing and fixing with sunken iron screws over existing base of iron or wood best quality deodar wood moulding as hand rails, stud, lath etc., of approved design 3 to 4 square inches (19.4 to 26 Sqm.) in cross section as required.	Rft. Ru.m.	535.45 1,756.72
242	Providing and fixing with sunken iron screws over existing base of iron or wood best quality deodar wood moulding as hand rails, stud, lath etc., of approved design over 4 and up-to 6 square inches (26 and up to 39 Sqm.) in cross section as required.	Rft. Ru.m.	794.06 2,605.18
243	Providing and fixing with sunken iron screws over existing base of iron or wood best quality deodar wood moulding as hand raits, stud, iaths etc., of approved design over 6 and up-to 8 square inches (39 and up to 52 Sqm.) in cross section as required.	Rft. Ru.m.	1,044.15 3,425.70
244	Providing and fixing with sunken iron screws over existing base of iron or wood best quality pan wood moulding as hand rails stud, laths etc., of approved design 3 to 4 square inches (19.4 to 26 Sqm.) in cross section as required.	Rft. Ru.m.	367.34 1,205.19
245	Providing and fixing with sunken iron screws over existing base of iron or wood best quality pan wood moulding as hand rails, stud, laths etc., of approved design over 4 and up-to 6 square inches (26 and up to 39 Sqm) in cross section as required .	Rft. Ru.m.	476.14 1,562.15
246	Providing and fixing with sunken iron screws over existing base of iron or wood best quality pan wood moulding as hand rails, stud, laths etc. of approved design over 6 and up-to 8 square inches (39 and up to 52 Sqm.) in cross section as required.	Rft. Ru.m.	612.38 2,009.13

(35) PICTURE RAILS

S. No.	Description	Unit	Rate in Rs.
247	Providing and fixing with sunken iron screws and rawal plugs best quality imported teak wood moulded picture rails upto 3 square inches (19.4 Sqm) in cross section on walls etc., as required.	Rft. Ru.m.	638.50 2,094.80
248	Providing and fixing with sunken iron screws and rawal plugs best quality imported teak wood moulded picture rails over 3 and up-to 6 square inches (19.4 and upto 39 Sqm.) in cross section on walls etc., as required .	Rft. Ru.m.	1,212.64 3,978.48

WOOD WORKS

SUB-HEAD CODE 120

S. No.	Description	Unit	Rate in Rs.
249	Providing and fixing with sunken iron screws and rawal plugs best quality imported teak wood moulded picture rails over 6 and up-to 8 square inches (39 and upto 52 Sqm) in cross section in walls etc., as required .	Rft. Ru.m.	1,590.51 5,218.21
250	Providing and fixing with sunken iron screws and rawal plugs best quality deodar wood moulded picture rails up-to 3 square inches (19.4 Sqm.) in cross section on walls etc., as required .	Rft. Ru.m.	373.97 1,226.94
251	Providing and fixing with sunken iron screws rawal plugs best quality deodar wood moulded picture rails over 3 and up to 6 square inches (19.4 and up-to 39 Sqm.) in cross section on walls etc., as required .	Rft. Ru.m.	697.70 2,289.05
252	Providing and fixing with sunken iron screws and rawal plugs best quality deodar wood moulded picture rails over 6 and up to 8 square inches (39 and up-to 52 Sqm.) in cross section on walls etc., as required.	Rft. Ru.m.	902.72 2,961.67
253	Providing and fixing sunken iron screws and rawal plugs best quality pan wood moulded picture rails upto 3 square inches (19.4 Sqm.) in cross section on walls etc., as required .	Rft. Ru.m.	210.17 689.53
254	Providing and fixing with sunken iron screws and rawal plugs best quality pan wood moulded picture rails over 3 and up-to 6 square inches (19.4 and up-to 39 Sqm.) in cross section on walls etc., as required .	Rft. Ru.m.	359.43 1,179.22
255	Providing and fixing with sunken iron screws and rawal plugs best quality pan wood moulded picture rails ove 6 and up-to 8 square inches (39 and up-to 52 Sqm.) in cross section on walls etc., as required .	Rft. Ru.m.	463.06 1,519.23
	(36) EAVE AND BARGE BOARD		
256	Providing and fixing with iron screws one inch (25 mm) thick best quality deodar wood eave or barge board etc., as required .	Sq.ft. Sq.m.	1,053.38 11,338.45
257	Providing and fixing with screws 3/4 inch {19 mm) thick best quality deodar wood eave or barge board etc., as required .	Sq.ft. Sq.m.	801.52 8,626.80
	(37) RAILING AND BALUSTRADE		
258	Providing and fixing best quality imported teak wood railing of approved design and section in staircase, balcony or parapet wrth teak wood balusters of approved design and sections fixed into stringers, steps or walls having hand rail wrth turning, bends post, newal post etc., fixed with flat iron and screws including cutting holes in stringers walls steps etc., and making good as required but excluding cost of stringers, steps and flat iron .	Cft. Cu.m.	30,009.14 1,059,763.85

WOOD WORKS
SUB-HEAD CODE 120

S. No.	Description	Unit	Rate in Rs.
259	Providing and fixing best quality deodar wood railing of approved design and sections in staircase, balcony or parapet with deodar wood balusters fixed into stringers, steps or walls having hand rail with turning, bend post and newal post etc., fixed with flat iron and screws including cutting holes in stringers walls steps etc., and making good as required but excluding cost of stringers steps and flat iron.	Cft. Cu.m.	18,203.36 642,846.29
260	Providing and fixing best quality pan wood railing of approved design and section in staircase, balcony or parapet with pan wood balusters fixed into stringers, steps or walls having hand rail with turning, bend post and newal post etc, fixed with flat iron and screws including cutting holes in tringers wall steps etc., making good as required but excluding cost of stringers steps and flat iron .	Cft. Cu.m.	10,872.72 383,966.75
	(38) STAIRS		
261	Providing arid fixing best quality imported teak wood in stairs with or without stringers and landing joist including cost of moulded nosing and stringers, cutting groove for fixing step planks with screws, bolts etc., but excluding cost of balustrade as required .	Cft. Cu.m.	25,303.24 893,576.30
262	Providing and fixing best quality deodar wood in stairs with or without stringers and landing joist including cost of moulded nosing and stringers, cutting grooves for fixing step planks with screws, bolts etc., but excluding cost of balustrade as required .	Cft. Cu.m.	14,388.91 508,140.01
263	Providing and fixing best quality pan wood in stairs with or without stringers and landing joist including cost of moulded nosing and stringers, cutting grooves for fixing step planks with screws, bolts etc., but excluding cost of balustrade as required .	Cft. Cu.m.	7,228.95 255,288.32
264	Providing and fixing best quality shesham wood in stairs with or without stringers and landing joists including cost of moulded nosing and stringers, cutting groove for fixing step planks with screws, bolts etc. excluding cost of balustrade as required.	Cft. Cu.m.	7,351.17 259,604.21
	(39) SOUND PROOFING AND AIR CONDITIONING SHUTTERS		
265	Providing and fixing one inch (25 mm) thick imported cork sheet with approved adhesive to shutters and frame including leveling, finishing neatly as required .	Sq.ft. Sq.m.	509.82 5,487.67
266	Providing and fixing 3/4 inch (19 mm) thick imported cork sheet with approved adhesive to shutters and frame including leveling finishing neatly as required .	Sq.ft. Sq.m.	405.65 4,366.43
267	Providing and fixing 1/2 inch (13 mm) thick imported cork sheet with approved adhesive to shutters and frame including leveling finishing neatly as required .	Sq.ft. Sq.m.	321.55 3,461.11

WOOD WORKS
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S. No.	Description	Unit	Rate in Rs.
268	Providing and fixing one inch (25 mm) thick foam rubber sheet with approved adhesive and edge metalling screwed to shutters and frame including levelling, finishing neatly polishing metal portion as required	Sq.ft.	637.41
		Sq.m.	6,860.99
269	Providing and fixing 3/4 inch (19 mm) thick foam rubber sheet with approved adhesive and edge metalling screwed to shutters and frame including levelling, finishing neatly polishing metal portion as required	Sq.ft.	610.88
		Sq.m.	6,575.41
270	Providing and fixing 1/2 inch (13 mm) thick foam rubber sheet with approved adhesive and edge metalling screwed to shutters and frame including levelling, finishing neatly, polishing metal portion as required	Sq.ft.	590.98
		Sq.m.	6,361.23
271	Providing and fixing 1/2 inch (13mm) thick 'Namda' with approved adhesive and edge metalling screwed to shutters and frame including- levelling, finishing neatly, polishing metal portion as required	Sq.ft.	406.87
		Sq.m.	4,379.47

(40) EXTRA FOR FRAME AND PANELS

272	Extra for curved member in best quality imported teak wood frame including wastage etc., over item 1 .	Cft.	15,240.59
		Cu.m.	538,217.00
273	Extra for curved member in best quality deodar wood frame including wastage etc., over item 2 .	Cft.	7,723.48
		Cu.m.	272,752.23
274	Extra for curved member in best quality pan wood frame including wastage etc., over item 3 .	Cft.	3,901.82
		Cu.m.	137,791.60
275	Extra for curved member in best quality shesham wood frame including wastage etc., over item 4.	Cft.	4,238.60
		Cu.m.	149,685.00
276	Extra for curved member in best quality sal wood frame including wastage etc., over item 5 .	Cft.	4,380.72
		Cu.m.	154,703.85
277	Extra for fully panelled curved shutters in best quality imported teak wood including wastage etc., over item 14 to 19 .	Sq.ft.	2,063.52
		Sq.m.	22,211.50
278	Extra for fully panelled curved shutters in best quality deodar wood including wastage etc. over items 20 to 22, 27 and 28 .	Sq.ft.	1,047.67
		Sq.m.	11,277.03
279	Extra for fully glazed curved shutters in best quality imported teak wood including wastage etc., over item Nos. 33 to 37 .	Sq.ft.	1,092.73
		Sq.m.	11,761.99
280	Extra for fully glazed curved shutters in best quality deodar wood including wastage etc., over item Nos. 38 to 42.	Sq.ft.	569.12
		Sq.m.	6,125.93
281	Extra for partly panelled and partly glazed curved shutters in best quality imported teak wood including wastage etc., over items 43 to 47 .	Sq.ft.	1,437.08
		Sq.m.	15,468.62
282	Extra for partly panelled and partly glazed curved shutters in best quality deodar wood including wastage etc., over items 48 to 52 .	Sq.ft.	913.17
		Sq.m.	9,829.25

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S. No.	Description	Unit	Rate in Rs.
283	Providing and fixing best quality imported teak wood projected beading upto one Sq. inch (6.45 Sqm.) wide in section, design, fixed around the panels of doors, windows, etc., of any description .	Rft. Rum.	140.63 461.38
284	Providing and fixing best quality deodar wood projected beading upto one Sq. inch (6.45 Sqm.) in sections and required design fixed around the panels of doors, windows etc., of any description	Rft. Rum.	93.38 306.36
285	Extra for ornamental work in panelling of best quality imported teak wood shutters including wastage over item 14 to 16, 19 and 43 to 47 (only ornamental panelled area to be measured)	Sq.ft. Sq.m.	1,066.97 11,484.73
286	Extra for steel work if sliding shutters of any description are provided in cavity walls over item 99 to 116.	Sq.ft. Sq.m.	58.42 628.81
287	Extra for providing 1-3/4 inches (44 mm) thick openable best quality imported teak wood shutters with brass hinges fan light stay and window catch in staircase glazing over item 144 (openable area to be measured) .	Sq.ft. Sq.m.	1,439.78 15,497.63
288	Extra for providing 1-1/2 inches (38 mm) thick openabte best quality imported teak wood shutters with brass hinges fan light stay and window catch on staircase glazing over item 145 (openable area to be measured)	Sq.ft. Sq.m.	1,252.39 13,480.64
289	Extra for providing 1-1/4 inches (32 mm) thick openable best quality imported teak wood shutters with brass hinges fan light stay and window catch in staircase glazing over item 146 (openable area to be measured).	Sq.ft. Sq.m.	839.46 9,035.86
290	Extra for providing 1-3/4 inches (44 mm) thick openeable best quality deodar wood shutters with iron hinges, brass window catch and fan-light stay in staircase glazing over item- 147 (openable area to be measured) .	Sq.ft. Sq.m.	853.68 9,188.90
291	Extra for providing 1-1/2 inches (38 mm) thick openable best quality deodar wood shutters with iron hinges, brass window catch and fan-light stay instaircase glazing over item 148 (openable area to be measured)	Sq.ft. Sq.m.	791.36 8,518.17
292	Extra for providing 1-1/4 inches (32 mm) thick openable best quality deodar wood shutters with iron hinges brass window catch and fanlight stay in staircase glazing over item 149 (Openable area to be measured)	Sq.ft. Sq.m.	475.09 5,113.77
293	Extra for providing doors and windows with frame 2" x 1-1 /4" (51 mm x 32 mm) in trellis work of best quality deodar wood including cost of wood work, approved iron hinges and tower bolts etc., over item 172 and 173 (Openable area to be measured).	Sq.ft. Sq.m.	710.49 7,647.68
	(41) EXTRA FOR GLAZING		
294	Extra if glass panes of 32 oz. (9.6 kg/ SqM.) is provided instead of 24 oz. (7-34 kg/Sqm.) glass panes (for glazed portion only) over item 35 to 37, 40 to 42,45 to 47, 50 to 52, 69 to 84,103 to 112,115,116,144 to 149,162 to 167 and 182 to 189 .	Sq.ft. Sq.m.	20.63 222.01

S. No.	Description	Unit	Rate in Rs.
295	Extra if 3/16 inches (4.8 mm) thick plate glass is provided instead of 24 oz. (7.34 kg/ SqM.) glass panes (for glazed portion only) over items 35 to 37, 40 to 42,45 to 47, 50 to 52, 69 to 84,103 to 112,115,116,144 to 149,162 to 167 and 182 to 189 .	Sq.ft. Sq.m.	75.63 814.02
296	Extra if 1/4 inch (6.4 mm) thick plate glass is provided instead of 24 Oz. (7.34 kg/ Sqm) glass panes (for glazed portion only) over items 35 to 37, 40 to 42,45 to 47, 50 to 52, 69 to 84,103 to 112,115,116,144 to 149,162 to 167 and 182 to 189 .	Sq.ft. Sq.m.	144.38 1,554.04
297	Extra if 24 Oz. (7.34 kg/ Sqm.) frosted glass panes is provided instead of 24 Oz.(7.34 kg/ Sqm.) glass panes (for glazed portion only) over item 35 to 37, 40 to 42,45 to 47, 50 to 52, 69 to 84,103 to 112,115,116,144 to 149,162 to 167 and 182 to 189 .	Sq.ft. Sq.m.	6.88 74.00
298	Extra if 24 Oz. (7.34 kg/ Sqm.) coloured glass panes is provided instead of 24 Oz. (7.34 kg/ Sqm.) glass panes (for glazed portion only) over item 35 to 37, 40 to 42,45 to 47, 50 to 52, 69 to 84,103 to 112,115,116,144 to 149,162 to 167 and 182 to 189 .	Sq.ft. Sq.m.	89.38 962.02
299	Extra if 6mm thick wired glass panes are provided instead of 24 Oz. (7.34 kg/ Sqm.) glass panes (for glazed portion only) over item 35 to 37, 40 to 42,45 to 47, 50 to 52, 69 to 84,103 to 112,115,116,144 to 149,162 to 167 and 182 to 189 .	Sq.ft. Sq.m.	350.63 3,774.09
300	Extra if miror glass 24.0z (7.34 kg/ Sqm.) white masonrte backing is provided instead of 24 Oz. (7.34 kg/ Sqm.) glass panes (for glazed portion only over item 35 to 37, 40 to 42,45 to 47, 50 to 52, 69 to 84,103 to 112,115,116,144 to 149,162 to 167 and 182 to 189 .	Sq.ft. Sq.m.	291.13 3,133.64
301	Extra if impregnated mica glass sheet is provided instead of 24 Oz. (7.34 KG/Sqm) glass panes (for glazed portion only) over item 35 to 37, 40 to 42,45 to 47, 50 to 52, 69 to 84,103 to 112,115,116,144 to 149,162 to 167 and 182 to 189 .	Sq.ft. Sq.m.	364.38 3,922.10
302	Extra if 5/16 inches (7.9 mm) thick plate glass is provided instead of 1/4 inch (6.4 mm) thick plate glass (for glazed portion only) over item 43, 44, 48, 49, 107, 108,110 and 111.	Sq.ft. Sq.m.	178.75 1,924.05
303	Extra if frosted plate glass 1/4 inch (6.4 mm) thick is provided instead of 1/4 inch (6.4 mm) thick plain plate glass for glazed portion only over item 43, 44, 48, 49, 107, 108,110 and 111.	Sq.ft. Sq.m.	123.75 1,332.03
304	Extra if wired plate glass 1/4 inch (6.4 mm) thick is provided instead of 1/4 inch (6.4 mm) thick plain plate glass (for glazed portion only) over item 43, 44, 48, 49, 107, 108,110 and 111.	Sq.ft. Sq.m.	165.00 1,776.04
305	Extra if miror plate glass 1/4 inch (6.4 mm) thick with masonite backing is provided instead of 1/4 inch (6.4 mm) thick plain plate glass (for glazed portion only) over items 43, 44, 48, 49, 107, 108,110 and 111.	Sq.ft. Sq.m.	237.38 2,555.08

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S. No.	Description	Unit	Rate in Rs.
306	Extra if impregnated mica glass sheet is provided instead of 1/4 inch (6.4 mm) thick plain plate glass (for glazed portion only) over items 43, 44, 48, 49, 107, 108,110 and 111.	Sq.ft.	178.75
		Sq.m.	1,924.05
307	Extra if double glazing is provided with 24 Oz. (7.34 KG/SQM) plain glass including the cost of making recesses and beading of required wood etc., complete (glazed area to be measured) over items Nos. 35 to 37, 40 to 42,45 to 47, 50 to 52, 69 to 84,103 to 112,115,116,144 to 149,162 to 167 and 182 to 189 .	Sq.ft.	534.65
		Sq.m.	5,754.93
308	Extra if double glazing is provided with 32 Oz. (9.6 KG/SQM.) plain glass including the cost of making recesses and beading of required wood etc., complete over item 288 (glazed area to be measured).	Sq.ft.	556.59
		Sq.m.	5,991.09
309	Extra if double glazing is provided with 3/16 inches (4.8 mm) thick plate glass including the-cost of making recesses and wooden beading of required wood etc., complete over item 291 (glazed area to be measured) ...	Sq.ft.	585.71
		Sq.m.	6,304.57
310	Extra if double glazing is provided with 1/4 inch (6.4 mm) thick plate glass including the cost of making recesses and beading of required wood etc., complete over items 33,34, 38,39, 43, 44, 48,49,91,94 to 98, 104, 105, 107, 108. 110 and 111 (glazed area be measured) .	Sq.ft.	952.30
		Sq.m.	10,250.46
	(42) EXTRA FOR FITTINGS		
311	Extra if approved oxidised brass hinges and tower bolts are provided instead of plain brass hinges and tower bolts, for fully panelled, fully glazed, partly panelled and partly striped glazed and fully glazed clad shutters over items 14 to 19, 33 to 37, 43 to 47, 69 to 72 and 77 to 80 .	Sq.ft.	27.91
		Sq.m.	300.46
312	Extra if approved chromium plated brass hinges and tower bolts are provided instead of plain brass hinges and tower bolts for fully panelled, fully glazed, partly panelled and partly glazed, fully striped glazed, partly panelled and partly striped glazed and fully glazed clad shutters over item Nos. 14 to 19, 33 to 37, 43 to 47, 69 to 72 and 77 to 80.	Sq.ft.	22.85
		Sq.m.	245.92
313	Extra if approved oxidised brass butt hinges, spring hinges and tower bolt are provided instead of plain brass butt hinges, spring hinges and tower bolts for fully wire gauzed, partly wire gauzed and partly panelled shutters over items 124 to 127 and 132 to 135.	Sq.ft.	(23.88)
		Sq.m.	(257.08)
314	Extra if approved oxidised iron ;hinges and tower bolts are provided instead of approved plain iron hinges and tower bolts for fully panelled, fully glazed, partly panelled and partly glazed, fully striped glazed and partly panelled and partly striped glazed shutters over items 20 to 30,38 to 42, 48 to 52, 73 to 76. and 81 to 84 .	Sq.ft.	19.27
		Sq.m.	207.44

WOOD WORKS

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S. No.	Description	Unit	Rate in Rs.
315	Extra if approved brass hinges and tower bolts are provided instead of approved plain iron hinges and tower bolt for fully panelled, fully glazed, partly panelled and partly glazed, fully striped glazed & partly panelled and partly striped glazed shutters over items 20 to 30,38 to 42, 48 to 52, 73 to 76. and 81 to 84 .	Sq.ft.	72.32
		Sq.m.	778.41
316	Extra if approved oxidised brass hinges and tower bolts are provided instead of iron hinges and tower bolts for fully panelled, fully glazed and partly panelled and partly glazed, fully striped glazed partly panelled and partly striped glazed shutters over items 20 to 30,38 to 42, 48 to 52, 73 to 76. and 81 to 84 .	Sq.ft.	52.05
		Sq.m.	560.29
317	Extra if approved chromium plated iron hinges and tower bolt are provided instead of plain iron hinges and tower bolt for fully panelled, fully glazed, partly panelled and partly glazed, fully striped glazed and partly panelled and partly striped glazed shutters over items 20 to 30,38 to 42, 48 to 52, 73 to 76. and 81 to 84 .	Sq.ft.	15.40
		Sq.m.	165.79
318	Extra if approved chromium plated brass hinges and tower bolts are provided instead of plain iron hinges and tower bolt for fully panelled, fully glazed, partly panelled and partly glazed, fully striped glazed and partly panelled and partly striped glazed shutters over item 20 to 30,38 to 42, 48 to 52, 73 to 76. and 81 to 84 .	Sq.ft.	79.58
		Sq.m.	856.57
319	Extra if oxidised iron tee-hinges and tower bolt are provided instead of plain iron T. hinges & tower bolt in battened, lodged and braced shutters over items 117 to 120 .	Sq.ft.	6.09
		Sq.m.	65.59
320	Extra if oxidised iron hinges and tower bolt are provided instead of plain iron hinges and tower bolt in fully iron barred and fully expanded metal shutters over items 121 to 123 and 140 to 143.	Sq.ft.	(5.86)
		Sq.m.	(63.10)
321	Extra if approved oxidised brass hinges, window catches and fan light stays are provided instead of plain brass hinges window catches and fan light stays for stair glazings over item 287 to 289.	Sq.ft.	23.32
		Sq.m.	251.05
322	Extra if approved C.P. brass hinges, window catches and fan light stays are provided instead of plain brass hinges fan light stays and window catches for stair glazings over items 287 to 289.	Sq.ft.	159.86
		Sq.m.	1,720.69
323	Extra if approved oxidised iron hinges, oxidised brass window catches and fan light stays are provided instead of approved plain iron hinges, brass window catches and fan light stays for stair glazings over items 290 to 292 .	Sq.ft.	22.53
		Sq.m.	242.52
324	Extra if approved brass hinges, brass window catches and fan light stays are provided instead of approved plain iron hinges brass window catches and fan light stays for stair glazing over items 290 to 292.	Sq.ft.	133.35
		Sq.m.	1,435.41

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S. No.	Description	Unit	Rate in Rs.
325	Extra if approved oxidised brass hinges brass window catches and fan light stays are provided instead of plain iron hinges brass window catches and fan light stays for stair glazing over items 290 to 292.	Sq.ft. Sq.m.	156.68 1,686.45
326	Extra if approved C.P. brass hinges, C.P. brass window catches and fan light stays are provided instead of plain iron hinges brass window catches and fan light stays for stair glazing over items 287 to 289.	Sq.ft. Sq.m.	293.21 3,156.10
327	Extra if approved oxidised brass helical double action spring hinges are provided instead of plain brass helical double action spring hinges for fully panelled swing fully glazed swing and fully veneered swing shutters over items 150 to 155, 162 to 164, and 168 to 170.	Sq.ft. Sq.m.	(148.40) (1,597.36)
328	Extra if approved C.P. brass helical double action spring hinges are provided instead of plain brass helical double action spring hinges for fully panelled swing fully glazed swing and fully veneered swing shutters over items 150 to 155, 162 to 164, and 168 to 170.	Sq.ft. Sq.m.	(184.51) (1,986.04)
329	Extra if approved oxidised iron helical double action spring hinges are provided instead of approved plain iron helical double action spring higes for fully panelled swing fully glazed swing and fully veneered swing shutters over items 156 to 161 and 165 to 167.	Sq.ft. Sq.m.	16.51 177.73
330	Extra if approved brass helical double action spring hinges are provided instead of approved plain iron helical double action spring hinges for fully panelled swing, fully glazed swing and fully veneered swing shutters over items 156 to 161 and 165 to 167.	Sq.ft. Sq.m.	665.14 7,159.53
331	Extra if approved oxidised brass helical double action spring hinges are provided instead of plain iron helical double action spring hinges for fully panelled swing, fully glazed swing and fully veneered swing shutters over items 156 to 161 and 165 to 167.	Sq.ft. Sq.m.	516.51 5,559.68
332	Extra if approved C.P. brass helical double action spring hinges are provided instead of plain iron helical double action spring hinges for fully panelled swing, fully glazed swing and fully veneered swing shutters over items 156 to 161 and 165 to 167.	Sq.ft. Sq.m.	481.10 5,178.46
333	Extra if brass piano hinges are provided instead of oxidised brass hinges over items 311 and 316.	Sq.ft. Sq.m.	38.44 413.79
334	Extra if brass piano hinges are provided instead of C.P. brass hinges over items 312 and 318.	Sq.ft. Sq.m.	34.50 371.37
335	Extra if brass piano hinges are provided instead of oxidised iron hinges over items 314.	Sq.ft. Sq.m.	72.14 776.54
336	Extra if brass piano hinges are provided instead of brass hinges over item 315.	Sq.ft. Sq.m.	44.68 480.90

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S. No.	Description	Unit	Rate in Rs.
337	Exta if brass piano hinges are provided instead of C.P. iron hinges over item 317.	Sq.ft. Sq.m.	73.41 790.18
338	Extra if oxidised brass piano hinges are provided instead of oxidised brass hinges over items 311 and 316.	Sq.ft. Sq.m.	39.21 422.01
339	Extra if oxidised brass piano hinges are provided instead of C.P. brass hinges over items 312 and 318.	Sq.ft. Sq.m.	35.26 379.59
340	Extra if oxidised brass piano hinges are provided instead of oxidised iron hinges over item 314.	Sq.ft. Sq.m.	86.25 928.40
341	Extra if oxidised brass piano hinges are provided instead of brass hinges over item 315.	Sq.ft. Sq.m.	45.41 488.75
342	Extra if oxidised brass piano hinges are provided instead of C.P- iron hinges over item 317 .	Sq.ft. Sq.m.	73.59 792.12
343	Extra if chromium plated brass piano hinges are provided instead of oxidised brass hinges over items 311 & 316.	Sq.ft. Sq.m.	30.47 327.93
344	Extra if chromium plated brass piano hinges are provided instead of C.P. brass hinges over items 312 and 318.	Sq.ft. Sq.m.	34.38 370.04
345	Extra if chromium plated brass piano hinges are provided instead of oxidised iron hinges over item 314.	Sq.ft. Sq.m.	72.10 776.13
346	Extra if chromium plated brass piano hinges are provided instead of brass hinges over item 315.	Sq.ft. Sq.m.	44.64 480.48
347	Extra if C.P. brass piano hinges are provided instead of C.P. iron hings over item 317 .	Sq.ft. Sq.m.	72.82 783.86
	(43) EXTRA FOR GAUZING		
348	Extra if brass wire gauze is provided instead of G.I. wire gauze in fully wire gauzed shutters over items 128 to 131	Sq.ft. Sq.m.	657.83 7,080.83
349	Extra if copper wire gauze is provided instead of G.I. wire gauze in fully wire gauzed shutters over items 128 to 131	Sq.ft. Sq.m.	466.23 5,018.45
350	Extra if aluminium wire gauze is provided instead of G.I wire gauze in fully wire gauze shutters over items 128 to 131	Sq.ft. Sq.m.	(31.33) (337.18)
351	Extra if copper wire gauze is provided instead of brass wire gauze in fully wire gauzed shutters over Items 124 to 127	Sq.ft. Sq.m.	(191.60) (2,062.38)
352	Extra if brass wire gauze is provided instead of G.I. wire gauze in partly wire gauzed and partly panelled shutters over items 136 to 139	Sq.ft. Sq.m.	328.92 3,540.42

S. No.	Description	Unit	Rate in Rs.
353	Extra if copper wire gauze is provided instead of G.I. wire gauze in partly wire gauzed and partly panelled shutters over items 136 to 139	Sq.ft.	233.12
		Sq.m.	2,509.23
354	Extra if aluminium wire gauze is provided instead of G.t. wire gauze in. partly wire gauze and partly panelled shutters over items 136 to 139	Sq.ft.	(15.66)
		Sq.m.	(168.59)
355	Extra if brass wire gauze is provided instead of G.I. wire gauze in gauzing over item 230	Sq.ft.	1,093.75
		Sq.m.	11,773.02
356	Extra if copper wire gauze is provided instead of G.I. wire gauze in gauzing over item 230	Sq.ft.	775.18
		Sq.m.	8,343.98
357	Extra if aluminium wire gauze is provided instead of G.I. wire gauze in gauzing over item 230.	Sq.ft.	(52.08)
		Sq.m.	(560.62)
358	Extra if copper wire gauze is provided instead of brass wire gauze in gauzing over item 229	Sq.ft.	(318.57)
		Sq.m.	(3,429.03)
359	Extra for mild steel flat underneath hand rail or lath and brackets fixed in wall below hand rail or laths etc. including cost of cutting fixing brackets and making good damages etc., complete as required over items 238 to 246 and 258 to 280.	Cwt.	14,409.55
		50 kg.	14,181.98
	(44) DEDUCTIONS		
360	Deduct if fixed blades are provided in best quality imported teak wood fully venetianed shutters from items 53 to 56 .	Sq.ft.	850.56
		Sq.m.	9,155.32
361	Deduct if fixed blades are provided in best quality deodar wood fully venetianed shutters from items 57 to 60 .	Sq.ft.	335.13
		Sq.m.	3,607.31
362	Deduct if masonite panels are provided instead of deodar wood panels in fully panelled partition from items 178 to 181 .	Sq.ft.	988.03
		Sq.m.	10,635.10
363	Deduct if G.I. wire gauze is provided instead of brass wire gauze from Item, 124 to 127, 132 to 135 and 229 .	Sq.ft.	835.40
		Sq.m.	8,992.18
364	Deduct if nylon wire gauze is provided instead of brass wire gauze from 124 to 127, 132 to 135 and 229 .	Sq.ft.	716.57
		Sq.m.	7,713.05
365	Deduct if aluminium wire gauze is provided instead of brass wire gauze from items 124 to 127, 132 to 135 and 229 .	Sq.ft.	694.79
		Sq.m.	7,478.64
366	Deduct if nylon wire gauze is provided instead of G.I. wire gauze in fully wire gauzed shutters from items 128 to 131	Sq.ft.	58.73
		Sq.m.	632.22
367	Deduct if nylon wire gauze is provided instead of G.I. wire gauze in partly wire gauzed and partly panelled shutters from items 136 to 139.	Sq.ft.	29.37
		Sq.m.	316.11
368	Deduct if nylon wire gauze is provided instead of G.I wire gauze in gauzing over item 230.	Sq.ft.	94.13
		Sq.m.	1,013.17

WOOD WORKS
SUB-HEAD CODE 120

S. No.	Description	Unit	Rate in Rs.
369	Deduct if approved iron helical spring hinges are provided instead of brass helical spring hinges for fully panelled or fully glazed or pressed veneered swing shutters from items 150 to 155, 162 to 164 and 168 to 170.	Sq.ft. Sq.m.	665.14 7,159.53
370	Deduct if iron hinges and tower bolts are provided instead of brass hinges and tower bolts from items 85 to 93.	Sq.ft. Sq.m.	10.76 115.84
371	Deduct if putty is used instead of best quality deodar wood beading in glazing of deodar wood shutters from items 38 to 42 and 48 to 52.	Sq.ft. Sq.m.	32.47 349.54

FITTINGS AND FIXTURES

Code 121

FITTINGS & FIXTURE (SH- 121)

Brief Specification

Iron brass chromium plated oxidized or any other type of fittings as specified in the nomenclature, shall be of heavy type. The size and number of normal fittings required for certain doors and windows have been given in table of Pak PWD specification which shall be strictly adhered to unless otherwise directed by the Engineer-in-Charge. Sample of approved fittings shall be supplied to his office for reference as and when required.

RATES:

Rates shall cover all the requirement of work as included in the nomenclature of schedule of items of the contract and as specified in this chapter and shall include the cost of all labour, material and fittings given in table mentioned in Pak PWD specification, carriage sawing, joinery work placing framing, scaffolding, tools and plants but will not include the cost of holdfast.

PAKISTAN PUBLIC WORKS DEPARTMENT

FITTINGS AND FIXTURES
SUB-HEAD CODE 121

S. No.	Description	Unit	Rate in Rs.
	(1) PELMETS, CURTAINS, BRACKETS, RODS, AND PEG BOARDS		
1	Providing and fixing 3/4" (19 mm) thick best quality imported teak wood simple moulded or plain pelmet fixed with angle iron frame 3/4" x 3/4" x 1/4" (19 mm x 19 mm x 6.4 mm) thick with screws, brackets including cost of painting 3 coats on iron work only with approved anti-corrosive paints etc., as directed by the Engineer-in-Charge.	Sq.ft. Sq.m.	2,068.67 22,266.91
2	Providing and fixing 1/2" (13 mm) thick best quality imported teak wood simple moulded or plain pelmet fixed with angle frame 3/4"x 3/4" x 1/4" (19 mm) x 19mm x 6.4 mm) thick with screws including cost of painting 3 coats on iron work only with approved anticorrosive paints etc., as directed by the Engineer-in-Charge.	Sq.ft. Sq.m.	1,573.38 16,935.67
3	Providing and fixing 3/4' (19 mm) thick best quality deodar wood simple moulded or plain pelmet fixed with angle iron frame 3/4" x 3/4" x 1 /4" (19 mm x 19 mm x 6.4 mm) thick with screws including cost of painting 3 coats on iron work only with approved anticorrosive paints etc., as directed by the Engineer-in-Charge.	Sq.ft. Sq.m.	1,372.99 14,778.75
4	Providing and fixing 1/2" (13 mm) thick best quality deodar wood simple moulded or,-pelmet fixed with angle iron frame 3/4" x 3/4" x 1/4" (19 mm) x 19 mm x 6.4 mm) thick with screws including cost of painting 3 coats on iron work only with approved anticorrosive paints etc., as directed by the Engineer-in-Charge .	Sq.ft. Sq.m.	1,080.68 11,632.38
5	Providing and fixing 3/4" (19 mm) thick best quality imported teak wood simple moulded or plain pelmet fixed with teak wood brackets, screws, rawl plugs as, directed	Sq.ft. Sq.m.	2,161.04 23,261.21
6	Providing and fixing 1/2" (13 mm) thick best quality imported teak wood simple moulded or plain pelmet fixed with teak wood brackets, screws, rawl plugs as directed	Sq.ft. Sq.m.	1,607.48 17,302.77
7	Providing and fixing 3/4" (19 mm) thick best quality deodar wood simple moulded or plain pelmet fixed with deodar wood brackets, screws, rawl plugs as directed .	Sq.ft. Sq.m.	1,406.71 15,141.71
8	Providing and Fixing 1/2" (13 mm) thick best quality deodar wood simple moulded or plain pelmet fixed with deodar wood brackets, screws, rawl plugs, as directed..	Sq.ft. Sq.m.	1,099.79 11,838.02
9	Providing and fixing 1-1/4" (32 mm) thick best quality imported teak wood brackets for holding curtain rods moulded to details, fixed to wall or wood with screws, rawl plugs etc. as directed .	Sq.ft. Sq.m.	3,364.30 36,212.96

FITTINGS AND FIXTURES

SUB-HEAD CODE 121

S. No.	Description	Unit	Rate in Rs.
10	Providing and fixing 1-1/4" (32 mm) thick best quality deodar wood brackets for holding curtain rods moulded to details fixed to wall or wood with screws, rawl plugs etc., as directed .	Sq.ft.	2,050.31
		Sq.m.	22,069.33
11	Providing and fixing one inch (25 mm) thick best quality imported teak wood peg boards with bevelled edges, brass pegs of approved design fixed at 10" (254 mm) centre to centre with, screws and rawl plugs as directed .	Sq.ft.	2,941.01
		Sq.m.	31,656.69
12	Providing and fixing 3/4" (19 mm) thick best quality imported teak wood peg boards with bevelled edges, brass peges of approved design fixed at 10° (254 mm) centre to centre with screws and rawl plugs as directed by the Engineer-in-Charge .	Sq.ft.	2,393.92
		Sq.m.	25,767.94
13	Providing and fixing one inch (25 mm) thick best quality deodar wood peg boards with bevelled edges, brass pegs of approved design fixed at 10" (254 mm) centre to centre with screws and rawal plugs as directed	Sq.ft.	1,977.95
		Sq.m.	21,290.46
14	Providing and fixing 3/4" (19 mm) thick best quality deodar wood peg boards with bevelled edges, brass pegs of approved design fixed at 10" (254 mm) centre to centre with screws and rawal plugs as directed .	Sq.ft.	1,682.39
		Sq.m.	18,109.13
15	Deduct if iron pegs are fixed instead of brass pegs from item No. 11 to 14.	Sq.ft.	313.89
		Sq.m.	3,378.67
16	Add if chromium plated brass pegs are fixed instead of brass pegs on item No. 11 to 14.	Sq.ft.	122.22
		Sq.m.	1,315.59
17	Deduct if plastic pegs are fixed instead of brass pegs from item No. 11 to 14.	Sq.ft.	258.33
		Sq.m.	2,780.67
18	Providing and fixing best quality imported teak wood curtain rods one inch to 1-1/4" (25 mm to 32 mm) dia with end stay if required .	Rft.	434.17
		Ru.m.	1,424.46
19	Providing and fixing best quality deodar wood curtain rods 1" x 1-1/4" (25 mm x 32 mm) dia with end stay if required	Rft.	272.68
		Ru.m.	894.61
	(2) TUBES, RAILS AND RINGS		
20	Providing and fixing 1" (25 mm) dia, approved brass tubes with brass sockets as curtain rods .	Rft.	1,604.13
		Ru.m.	5,262.90
21	Providing and fixing 3/4" (19 mm) dia, approved brass tubes with brass sockets as curtain rods .	Rft.	784.13
		Ru.m.	2,572.61
22	Providing and fixing 1/2" (13 mm) dia, approved brass tubes with brass sockets as curtain rods .	Rft.	624.67
		Ru.m.	2,049.44

FITTINGS AND FIXTURES

SUB-HEAD CODE 121

S. No.	Description	Unit	Rate in Rs.
23	Providing and fixing 1" (25 mm) dia, approved chromium plated brass tubes with C.P. brass sockets as curtain rods	Rft.	1,286.06
		Ru.m.	4,219.37
24	Providing and fixing 3/4" (19 mm) dia, approved chromium plated brass tubes with C.P. brass sockets as curtain rods .	Rft.	736.06
		Ru.m.	2,414.90
25	Providing and fixing 1/2" (13 mm) dia, approved chromium plated braas tubes with C.P. brass sockets as curtain rods	Rft.	461.06
		Ru.m.	1,512.67
26	Providing and fixing C.P. Brass curtain rails with double roller runners, clamps etc., including the cost of brass screws, rawal plugs if required as directed by the Engineer-in-Charge..	Rft.	1,073.03
		Ru.m.	3,520.46
27	Providing and fixing approved aluminum curtain rails with double roller runner, clamps, etc., including the cost of chromium plated screws, rawal plugs if required as per direction of Engineer-in-Charge .	Rft.	527.45
		Ru.m.	1,730.49
28	Providing and fixing approved brass rings for curtain, 2" (51 mm) dia.	Dozen	778.13
			778.13
29	Providing and fixing approved brass rings for curtain, 1-1/2" (38 mm) dia .	Dozen	653.13
			653.13
30	Providing and fixing approved brass rings for curtain, 1-1/4" (32 mm) dia .	Dozen	590.63
			590.63
31	Providing and fixing approved brass rings for curtain, 1" (25 mm) dia .	Dozen	503.13
		Dozen	503.13
32	Providing and fixing approved chromium plated brass rings for curtain, 2" (51 mm) dia .	Dozen	778.13
		Dozen	778.13
33	Providing and fixing approved chromium plated brass rings for curtain, 1-1/2" (38 mm) dia .	Dozen	653.13
		Dozen	653.13
34	Providing and fixing approved chromium plated brass rings for curtain, 1-1/4" (32 mm) dia.	Dozen	590.63
		Dozen	590.63
35	Providing and fixing approved chromium plated brass rings for curtain, 1" (25 mm) dia .	Dozen	503.13
		Dozen	503.13
36	Providing and fixing approved plastic rings for curtain, 2" (51 mm) dia	Dozen	178.13
		Dozen	178.13
37	Providing and fixing approved plastic rings for curtain, 1-1/2" (38 mm) dia	Dozen	103.13
		Dozen	103.13
38	Providing and fixing approved-plastic rings for curtain, 1-1/4" (32 mm) dia	Dozen	96.88
		Dozen	96.88
39	Providing and fixing approved P.V.C. rings for curtain, 1" (25 mm) dia	Dozen	90.63
			90.63

FITTINGS AND FIXTURES

SUB-HEAD CODE 121

S. No.	Description	Unit	Rate in Rs.
	(3) STAYS AND DOOR HOLDERS		
40	Providing and fixing with iron screws approved iron casement peg stay (heavy type) in position as directed ..	Each Each	237.48 237.48
41	Providing and welding to steel windows approved iron oxidised casement peg sray (heavy type) in position as directed	Each Each	257.82 257.82
42	.Providing and fixing with brass screws approved brass casement peg stays (heavy type) in position as directed..	Each Each	856.26 856.26
	(4) STAY QUADRANT		
43	Providing and fixing with brass screws approved brass quadrant stays (heavy type), 10" (254 mm) size.	Each Each	1,043.76 1,043.76
44	Providing and fixing with brass screws approved brass quadrant stays (heavy type), 8" (203 mm) size .	Each Each	918.76 918.76
45	Providing and fixing with brass screws approved brass quadrant stays (heavy type), 6" (152 mm) size	Each Each	804.20 804.20
46	Providing and fixing with oxidized brass screws approved oxidized brass stays quadrant stays (heavy type), 10" (254 mm) size	Each Each	1,079.03 1,079.03
47	Providing and fixing with oxidized brass screws approved oxidized brass stays quadrant stays (heavy type), 8" (203 mm) size	Each Each	1,036.95 1,036.95
48	Providing and fixing with oxidized brass screws approved oxidized brass quadrant stays (heavy type), 6" (152 mm) size	Each Each	849.45 849.45
49	Providing and fixing with oxidized brass screws or with specially supplied screws heavy brass adjustable door holder, showell (5510), foot-operated bronze: 8-1/2" (216 mm) size .	Each Each	3,078.78 3,078.78
50	Providing and fixing with brass screws or with specially supplied screws heavy brass adjustable door holder, showell (551), spring action type bronze, size 2"x 1-1/4" (51 mm) x 38 mm) lockplate and 2-1/4" x 7/8" (57 mm x 22 mm) spring .	Each Each	2,735.03 2,735.03
51	Providing and fixing with brass screws or with specialty supplied screws heavy brass adjustable door holder, showell (5505/5506) with bronze, rubber stop, size 7" x 1-5/8" (178 mm x 41 mm) plate and rubber stop 1-1/2" (38 mm) dia .	Each Each	3,116.28 3,116.28

FITTINGS AND FIXTURES
SUB-HEAD CODE 121

S. No.	Description	Unit	Rate in Rs.
	(5) LOCKS		
52	Providing and fixing with C.P. brass screws main door handle type yale lock (Italy make) of approved design,cutting wood etc., to required size, with two operating keys, as per direction of the engineer-in-Charge.	Each	15,899.38
		Each	15,899.38
53	Providing and fixing with C.P. brass screws dado main door lock with handle (USA make) of approved design, cutting wood etc., to required size, with two operating keys as per direction of the Engineer-in-Charge .	Each	29,649.38
		Each	29,649.38
54	Providing and fixing C.P. brass screws kwikset main door lock (USA make) with handle of approved design, cutting wood etc., to required size, with two operating keys as per direction of the Engineer-in-Charge .	Each	32,149.38
		Each	32,149.38
55	Providing and fixing with C.P. brass screws carona main door lock with handle (Japan make) of approved design and colour (No. 24001), cutting wood etc., to required size, with two operating keys as per direction of the Engineer-in-Charge.	Each	10,274.38
		Each	10,274.38
56	Providing and fixing with C.P~ brass screws carona main door lock with handle (Japan make) of approved design and colour (No. 21102) cutting wood etc., to required size, with two operating keys as per direction of the Engineer-in-Charge.	Each	9,024.38
		Each	9,024.38
57	Providing and fixing with C.P. brass screws carona main door lock with handle (Japan make) of approved design and colour (No. 24002), cutting wood etc., to required size, with two operating keys as per direction of the Engineer-in-Charge .	Each	10,899.38
		Each	10,899.38
58	Providing and fixing with C.P. brass screws carona main door lock with handle (Japan make) of approved design and colour (No. 24032), cutting wood etc., to required size, with two operating keys as per direction of the Engineer-in-Charge.	Each	11,149.38
		Each	11,149.38
59	Providing and fixing with C.P. brass screws carona main door lock with handle (Japan make) of approved design and colour (No. 21051), cutting wood etc., to required size, with two operating keys as per direction of the Engineer-in-Charge.	Each	9,649.38
		Each	9,649.38
60	Providing and fixing with C.P. brass screws carona main door lock with handle (Japan make) of approved design and colour (No. 21082), cutting wood etc., to required size and shape with two operating keys as per direction of the Engineer-in-Charge .	Each	9,899.38
		Each	9,899.38
61	Providing and fixing with brass screws carona bath latch lock of approved design (No. 21031), (Japan make), cutting wood to required size and shape with two operating keys as per direction of the Engineer-in-Charge.	Each	3,024.38
		Each	3,024.38

FITTINGS AND FIXTURES

SUB-HEAD CODE 121

S. No.	Description	Unit	Rate in Rs.
62	Providing and fixing with brass screws carona bath latch lock of approved design and colour (No. 25011), (Japan make), cutting wood to required shape and size with two operating keys as per direction of the Engineer-in-Charge	Each	4,024.38
		Each	4,024.38
63	Providing and fixing with brass screws or specially supplied screws yale night latch of approved design and colour (No. 3612), (Japan make) cutting wood etc., to required shape and size with two operating keys as per direction of the Engineer-in-Charge.	Each	11,399.38
		Each	11,399.38
64	Providing and fixing with brass or specially supplied screws yale night latch design No. 620, (Japan make) cutting wood etc., to required shape and design as per direction of the Engineer-in-Charge .	Each	11,524.38
		Each	11,524.38
65	Providing and fixing with brass screws or specially supplied screws yale night latch design of approved design No. 610, Italian make, cutting wood etc., to required shape and size as per direction of the Engineer-in-charge.	Each	11,649.38
		Each	11,649.38
66	Providing and fixing with brass screws or specially supplied screws night latch design No. 558, China make, cutting wood, etc., to required shape as per direction of the Engineer-in-Charge .	Each	2,586.88
		Each	2,586.88
67	Providing and fixing with brass or specially supplied screws hydraulic branno door closer of approved deign No. 2, Yugoslavia make, cutting wood, etc., to required size and shape of necessary as per direction of the Engineer-in-Charge.	Each	8,081.25
		Each	8,081.25
68	Providing and fixing with brass screws or specially supplied screws hydraulic door closer branno of approved design No. 3 (Yugoslavia make), cutting wood etc., to required shape and size as per direction of Engineer-in-Charge.	Each	8,206.25
		Each	8,206.25
69	Providing and fixing with brass screws or specialty supplied screws hydraulic door closer Rayobi of approved design No. 62, Japan make, cutting wood etc., to required shape and size as per direction of engineer-in-charge.	Each	5,581.25
		Each	5,581.25
70	Providing and fixing with brass screws or specially supplied screws hydraulic door closer Rayobi or approved design No. 72, Japan make, cutting wood etc., to required shape and size as per direction of engineer-in-charge .	Each	9,331.25
		Each	9,331.25
71	Providing and fixing with brass screws or specially supplied screws hydraulic door closer of approved design No. 5002, Japan make, cutting wood etc., to required shape and size as per direction of the engineer-in-charge	Each	9,456.25
		Each	9,456.25
72	Providing and fixing with brass screw or specially supplied screws hydraulic door closer of approved design No. 707, Japan make, cutting wood etc., to required shape and size as per direction of the engineer-in-Charge	Each	8,706.25
		Each	8,706.25

FITTINGS AND FIXTURES

SUB-HEAD CODE 121

S. No.	Description	Unit	Rate in Rs.
73	Providing and fixing with brass screws Marathon knob set of approved design (USA make) cutting wood etc., to required shape and size with two operating keys as per direction of the Engineer-in-Charge	Each Each	23,911.25 23,911.25
74	Providing and fixing with brass screws Alpha "W" lock knob set Plain Latch of approved design (Japan make) cutting wood to required shape and size with two operating keys as per direction of the Engineer-in-Charge	Each Each	8,899.38 8,899.38
75	Providing and fixing with brass screws lucky lock knob set of approved design (Taiwan make) cutting wood to required shape and size with two operating keys as per direction of the Engineer-in-Charge.	Each Each	3,899.38 3,899.38
76	Providing and fixing with brass screws Alpha knob set lock of approved design (No. 7000) Japan make, cutting wood to required shape and size with two operating keys as per direction of the Engineer-in-Charge	Each Each	3,524.38 3,524.38
77	Providing and fixing with brass screws Alpha knob set bath latch of approved design No. 8000, Japan make, cutting wood to required shape and size with two operating keys as per direction of the engineer-in-Charge	Each Each	4,274.38 4,274.38
78	Providing and fixing with brass screws kwikset knob set lock of approved design and colour (USA make), cutting wood etc., to required shape and size with two operating keys as per direction of the Engineer-in-Charge.	Each Each	10,774.38 10,774.38
79	Providing and fixing with brass screws kwikset knob set bath latch of approved design and colour (USA make), cutting wood etc., to required shape and size with two operating keys as per direction of the engineer-in-charge .	Each Each	10,899.38 10,899.38
80	Providing and fixing with brass screws door lock handle type of approved design (Hungry make), cutting wood etc., to required shape and size with two operating keys as per direction of the Engineer-in-Charge.	Each Each	4,024.38 4,024.38
81	Providing and fixing with brass screws main door hariock pacemaker (USA make,) cutting wood etc., to required shape and size with two operating keys as per direction of the Engineer-in-Charge .	Each Each	28,399.38 28,399.38
82	Providing and fixing with brass screws door lucky lock of approved design and No. 6000 (Japan make), cutting wood etc., to required shape and size with two operating keys as per direction of the Engineer-in-Charge .	Each Each	3,649.38 3,649.38
83	Providing and fixing with brass screws door basti lock with handle of approved design (Japan make), cutting wood etc., to required shape and size with two operating keys as per direction of.the Engineer-in Charge	Each Each	6,649.38 6,649.38
84	Providing and fixing with brass screws door Alpha lock with handle of approved design (Taiwian make), cutting wood etc., to required shape and size with two operating keys as per direction of the Engineer-in-Charge.	Each Each	3,149.38 3,149.38

FITTINGS AND FIXTURES

SUB-HEAD CODE 121

S. No.	Description	Unit	Rate in Rs.
85	Providing and fixing with brass screws door Alpha "W" high living lock of approved design (Japan make), cutting wood etc., to required shape and size with two operating keys as per direction of the Engineer-in-Charge.	Each	7,774.38
		Each	7,774.38
86	Providing and fixing with brass screws door Alpha lock of approved design (Taiwian make), cutting wood etc., to required shape and size with two operating keys as per direction of the Engineer-in-Charge .	Each	2,774.38
		Each	2,774.38
87	Providing and fixing with brass screws Alpha knob set lock of approved design No. 6600 (Japan make), cutting wood etc., to required shape and size with two operating keys as per direction of the Engineer-in-Charge	Each	5,149.38
		Each	5,149.38
88	Providing and fixing with brass screws lylo line knob set lock of approved design (USA make), cutting wood etc., to required shape and size with two operating keys as per direction of the Engineer-in-Charge	Each	7,649.38
		Each	7,649.38
89	Providing and fixing with brass screws lylo line bath knob-set lock for bath latch of approved design (USA make), cutting wood etc., to required shape and size with two operating keys as per direction of the Engineer-in-Charge	Each	5,149.38
		Each	5,149.38
	(5) DRAWER AND CUPBOARD LOCKS		
90	Providing and fixing approved brass drawer and cupboard lock with brass screws including two operating keys: 2-3/4" (70 mm) size (4 levers)	Each	855.00
		Each	855.00
91	Providing and fixing approved brass drawer and cupboard locks with brass screws including two operating keys: 2-1/2" (64 mm) size (4 levers)	Each	855.00
		Each	855.00
	(6) FINGER PLATES		
92	Providing and fixing approved standard brass finger plate with brass screws: 6" x 2-1/2" (152 mm x 64 mm)...	Each	932.72
		Each	932.72
93	Providing and fixing approved standard brass oxidised finger plate with brass screws: 6" x 2-1/4" (152 mm x 58 mm).	Each	864.14
		Each	864.14
94	Providing and fixing approved standard aluminium finger plate with aluminium screws: 6" x 2-1/4")152 mm x 58 mm).	Each	814.66
		Each	814.66
	(7) SPRING HINGES		
95	Providing and fixing with brass screws approved single action helical brass spring hinges as per direction of the Engineer-in-Charge: 6" (152 mm) size	Each	3,033.65
		Each	3,033.65
96	Providing and fixing with brass screw approved single action helical brass spring hinges as per direction of the Engineer-in-Charge: 5" (127 mm) size.	Each	2,408.65
		Each	2,408.65

FITTINGS AND FIXTURES
SUB-HEAD CODE 121

S. No.	Description	Unit	Rate in Rs.
97	Providing and fixing with brass screws approved single action helical brass spring hinges as per direction of the Engineer-in-Charge: 4" (102 mm) size.	Each Each	2,221.15 2,221.15
98	Providing and fixing with brass screws approved double action helical brass spring hinges as per direction of the Engineer-in-Charge: 6" (152 mm) size	Each Each	3,597.45 3,597.45
99	Providing and fixing with brass screws approved double action helical brass spring hinges as per direction of the Engineer-in-Charge: 5" (127 mm) size..	Each Each	3,033.65 3,033.65
100	Providing and fixing with brass screws approved double action helical brass spring hinges as per direction of the Engineer-in-Charge: 4" (102 mm) size	Each Each	2,533.65 2,533.65
101	Providing and fixing with iron screws approved single action helical iron spring hinges as per direction of the Engineer-in-Charge: 6" (152 mm) size..	Each Each	1,021.96 1,021.96
102	Providing and fixing with iron screws approved single action helical iron spring hinges as per direction of the Engineer-in-Charge: 5" (127 mm) size.	Each Each	896.96 896.96
103	Providing and fixing with iron screws approved single action helical iron spring hinges as per direction of the Engineer-in-Charge: 4" (102 mm) size..	Each Each	771.96 771.96
104	Providing and fixing with iron screws approved double action helical iron spring hinges as per direction of the Engineer-in-Charge: 6" (152 mm) size.	Each Each	1,209.46 1,209.46
105	Providing and fixing with iron screws double action helical iron spring butt hinges as per direction of the Engineer-in-Charge: 4" (102 mm) size.	Each Each	834.46 834.46
	(8) PIANO HINGES		
106	Providing and fixing with brass screws approved piano hinges of brass sheet 3/4" (19 mm) wide as per direction of the Engineer-in-Charge ,	Rft. Rum	516.50 1,694.55
107	Providing and fixing with C.P.brass screws approved piano hinges of aluminium sheet 3/4" (19 mm) wide as per direction of the Engineer-in-charge .	Rft. Rum	466.50 1,530.51
108	Providing and fixing with iron screws approved piano hinges of iron sheet 3/4" (19 mm) wide as per direction of the Engineer-in-Charge.	Rft. Rum	299.88 983.84

FITTINGS AND FIXTURES
SUB-HEAD CODE 121

S. No.	Description	Unit	Rate in Rs.
	(9) PARLIAMENT HINGES		
109	Providing and fixing approved brass parliament hinges with brass screws: 5" x 1/4" or 127 mm x 6-4 mm .	Each Each	793.59 793.59
110	Providing and fixing approved brass parliament hinges with brass screws: 4" (102 mm) and 12 gauge (2.11 mm thick) .	Each Each	652.01 652.01
111	Providing and fixing approved brass parliament hinges with brass screws: 3" (76 mm) and 14 gauge (1.8 mm thick) .	Each Each	390.32 390.32
112	Providing and fixing approved iron parliament hinges with iron screws: 5" (127 mm) and 12 gauge (2.11 mm thick) .	Each Each	528.09 528.09
113	Providing and fixing approved iron parliament hinges with iron screws: 4" (102 mm) and 12 gauge (2.11 mm thick)..	Each Each	446.64 446.64
114	Providing and fixing approved iron parliament hinges with iron screws: 4" and 5/32" (102 mm and 3.97 mm thick)	Each Each	524.77 524.77
115	Providing and fixing approved iron parliament hinges with iron screws: 3" (76 mm) and 14 gauge (1.8 mm thick)	Each Each	324.82 324.82
116	Providing and fixing approved iron parliament hinges with iron screws: 3" x 1/8" (76 mm x 3.2 mm thick)....	Each Each	455.03 455.03
117	Providing and fixing approved brass oxidised parliament hinges with oxidised brass screws: 5" x 1/4" (127 mm x 6.4 mm thick).	Each Each	844.64 844.64
118	Providing and fixing approved brass oxidised parliament hinges with oxidised brass screws: 4" (102 mm) and 12 gauge (2.11 mm thick).	Each Each	572.73 572.73
119	Providing and fixing approved brass oxidised parliament hinges with oxidised brass screws: 3" (76 mm) and 14 gauge (1.8 mm thick).	Each Each	449.02 449.02
	(10) TEE HINGES		
120	Providing and fixing with galvanized iron screws approved heavy type galvanized iron tee hinges: 18" (457 mm) size as directed.	Each Each	518.02 518.02
121	Providing and fixing with galvanized iron screws approved heavy type galvanized iron tee hinges 12" (305 mm) size as directed.	Each Each	455.52 455.52
122	Providing and fixing with galvanized iron screws approved heavy type galvanized iron tee hinges 10" (254 mm) size as directed.	Each Each	393.02 393.02

FITTINGS AND FIXTURES

SUB-HEAD CODE 121

S. No.	Description	Unit	Rate in Rs.
	(11) SLIDING BOLTS OR ALDROP BOLTS		
123	Providing and fixing approved brass sliding bolts or aldrop bolts 12" x 3/4" (305 mm x 19 mm) size with necessary brass screws and iron bolts and nuts.	Each	3,669.30
		Each	3,669.30
124	Providing and fixing approved brass sliding bolts or aldrop bolts 10" x 5/8" (254 mm x 16 mm) size with necessary brass screws and iron bolts and nuts	Each	2,606.80
		Each	2,606.80
125	Providing and fixing approved brass sliding botts or aldrop bolts 9" x 5/8" (229 mm x 16 mm) size with necessary brass screws and iron bolts and nuts	Each	2,919.30
		Each	2,919.30
126	Providing and fixing approved brass sliding bolts or aldrop bolts 6" x 1/2" (152 mm x 13 mm) size with necessary brass screws and iron bolts and nuts..	Each	1,362.66
		Each	1,362.66
127	Providing and fixing approved oxidised brass sliding or aldrop bolts 12" x 3/4" (305 mm x 19 mm) size with necessary oxidised brass screws and bolts and nuts	Each	3,302.00
		Each	3,302.00
128	Providing and fixing approved oxidised brass sliding or aldrop bolts 10" x 5/8" (254 mm x 16 mm) size with necessary oxidised brass screws and bolts and nuts	Each	2,739.50
		Each	2,739.50
129	Providing and fixing approved oxidised brass sliding or aldrop bolts 9" x 5/8" (229 mm x 16 mm) size with necessary oxidised brass screws and bolts and nuts...	Each	2,664.50
		Each	2,664.50
130	Providing and fixing oxidised brass sliding or aldrop bolts 6" x 1/2" (152 mm x 13 mm) size with necessary oxidised brass screws and bolts and nuts .	Each	1,446.97
		Each	1,446.97
131	Providing and fixing approved chromium plated brass sliding or aldrop botts 12" x 5/8" (305 mm x 19 mm) size with necessary chromium plated brass screws and galvanized iron bolts and nuts .	Each	3,090.97
		Each	3,090.97
132	Providing and fixing approved chromium plated brass sliding aldrop bolts 10" x 5/8'" (254 mm x 16 mm) size with necessary chromium plated brass screws and galvanized iron bolts and nuts .	Each	2,759.72
		Each	2,759.72
133	Providing and fixing approved chromium plated brass sliding or aldrop bolts 9" x 5/8" (229 mm x 16 mm) size with necessary chromium plated brass screws and galvanized iron bolts and nuts .	Each	2,690.97
		Each	2,690.97
134	Providing and fixing approved chromium plated brass sliding or aldrop bolts 6" x 1/2' (152 mm x 13 mm) size and necessary chromium plated brass screws and galvanized iron bolts and nuts	Each	1,643.91
		Each	1,643.91

FITTINGS AND FIXTURES

SUB-HEAD CODE 121

S. No.	Description	Unit	Rate in Rs.
135	Providing and fixing approved heavy type oxidised iron sliding or aldrop bolts 12" x 3/4" (305 mm x 19 mm) size with necessary oxidised iron screws and oxidised iron bolts and nuts.	Each Each	919.20 919.20
136	Providing and fixing approved heavy type oxidised iron sliding or aldrop bolts 10" x 5/8" (254 mm x 1 6 mm) size with necessary oxidised iron screws and oxidised iron bolts and nuts..	Each Each	894.20 894.20
137	Providing and fixing approved heavy type oxidised iron sliding or aldrop bolts 9" x 5/8- (229 mm x 16 mm) size with necessary oxidised iron screws and oxidised iron bolts and nuts.	Each Each	881.70 881.70
138	Providing and fixing approved heavy type oxidised iron sliding or aldrop bolts 6" x 1/2" (152 mm x 13 mm) size with necessary oxidised iron screws and oxidised iron bolts and nuts.	Each Each	591.72 591.72
139	Providing and fixing approved heavy type iron sliding or aldrop bolts 12" x 3/4" (305 mm x 19 mm) size with necessary iron screws, iron bolts and nuts .	Each Each	964.35 964.35
140	Providing and fixing approved heavy type iron sliding or aldrop bolts 10" x 5/8" (254 mm x 16 mm) size with necessary iron screws, iron bolts and nuts .	Each Each	889.35 889.35
141	Providing and fixing approved heavy type iron sliding or aldrop bolts 9" x 5/8" (229 mm x 16 mm) size with necessary iron screws, iron bolts and nuts .	Each Each	864.35 864.35
142	Providing and fixing approved heavy type iron sliding or aldrop bolts 6" x 1/2" (152 mm x 13 mm) size with necessary iron screws, iron bolts and nuts .	Each Each	587.63 587.63
	(12) HASPS AND STAPLES		
143	Providing and fixing approved heavy type brass safety hasp and staple 5" (127 mm) size with necessary brass screws..	Each Each	215.79 215.79
144	Providing and fixing approved heavy type brass safety hasp and staple 4" (102 mm) size with necessary brass screws..	Each Each	194.96 194.96
145	Providing and fixing approved heavy type brass safety hasp and staple 3" (76 mm) size with necessary brass screws .	Each Each	167.54 167.54
146	Providing and fixing approved heavy type brass safety hasp and staple 2" (51 mm) size with necessary brass screws .	Each Each	157.13 157.13
147	Providing and fixing approved heavy type oxidised brass safety hasp and staple 5" (127 mm) size with necessary brass screws .	Each Each	220.13 220.13

FITTINGS AND FIXTURES

SUB-HEAD CODE 121

S. No.	Description	Unit	Rate in Rs.
148	Providing and fixing approved heavy type oxidised brass safety hasp and staple 4" (102 mm) size with necessary brass screws .	Each	209.71
		Each	209.71
149	Providing and fixing approved heavy type oxidised brass safety hasp and staple 3" (76 mm) size with necessary brass screws .	Each	181.33
		Each	181.33
150	Providing and fixing approved heavy type oxidised brass safety hasp and staple 2" (51 mm) size with necessary brass screws .	Each	160.50
		Each	160.50
151	Providing and fixing approved heavy type oxidised iron safety hasp and staple 5" (127 mm) size with necessary iron screws.	Each	172.21
		Each	172.21
152	Providing and fixing approved heavy type oxidised iron safety hasp and staple 4" (102 mm) size with necessary iron screws .	Each	153.46
		Each	153.46
153	Providing and fixing approved heavy type oxidised iron safety hasp and staple 3" (76 mm) size with necessary iron screws	Each	129.25
		Each	129.25
154	Providing and fixing approved heavy type oxidised iron safety hasp and staple 2" (51 mm) size with necessary iron screws .	Each	121.95
		Each	121.95
155	Providing and fixing approved heavy type painted iron safety hasp and staple 5" (127 mm) size with necessary iron screws .	Each	159.45
		Each	159.45
156	Providing and fixing approved heavy type painted iron safety hasp and staple 4" (102 mm) size with necessary iron screws .	Each	135.96
		Each	135.96
157	Providing and fixing approved heavy type painted iron safety hasp and staple 3" (76 mm) size with necessary iron screws .	Each	103.93
		Each	103.93
158	Providing and fixing approved heavy type painted iron safety hasp and staple 2" (51 mm) size with necessary iron screws .	Each	99.77
		Each	99.77
159	Providing and fixing approved brass handles 7" (178 mm) size heavy type with necessary brass screws .	Each	560.70
		Each	560.70
160	Providing and fixing approved brass handles 5" (127 mm) size heavy type with becessary brass screws .	Each	357.74
		Each	357.74
161	Providing and fixing approved brass handles 4" (102 mm) size heavy type with necessary brass screws .	Each	305.65
		Each	305.65
162	Providing and fixing oxidised handles 7" (178 mm) size heavy type with necessary brass screws .	Each	446.82
		Each	446.82
163	Providing and fixing approved oxidised brass handles 5" (127 mm) size heavy type with necessary brass .	Each	320.70
		Each	320.70

FITTINGS AND FIXTURES
SUB-HEAD CODE 121

S. No.	Description	Unit	Rate in Rs.
164	Providing and fixing approved oxidised brass handles 4" (102 mm) size heavy type with necessary brass .	Each	287.36
		Each	287.36
165	Providing and fixing approved chromium plated brass handles 7" (178 mm) size heavy type with necessary brass screws .	Each	608.31
		Each	608.31
166	Providing and fixing approved chromium plated brass handles 5" (127 mm) size heavy type with necessary brass screws .	Each	508.57
		Each	508.57
167	Providing and fixing approved chromium plated brass handles 4" (102 mm) size heavy type with necessary brass screws.	Each	446.07
		Each	446.07
168	Providing and fixing approved heavy type aluminium handles 7" (178 mm) size or approved make with approved type of screws.	Each	311.72
		Each	311.72
169	Providing and fixing approved heavy type aluminium handles 5" (127 mm) size of approved make with approved type of screws .	Each	237.39
		Each	237.39
170	Providing and fixing approved heavy type aluminium handles 4" (102 mm) size of approved make with approved type of screws..	Each	174.89
		Each	174.89
171	Providing and fixing approved heavy type iron handles 5" (127 mm) size with necessary iron screws.	Each	118.64
		Each	118.64
172	Providing and fixing approved heavy type iron handles 4" (102 mm) size with necessary iron screws.	Each	112.39
		Each	112.39
173	Providing and fixing approved heavy type oxidised iron handles 5" (127 mm) size with necessary oxidised iron screws.	Each	138.99
		Each	138.99
174	Providing and fixing approved heavy type oxidised iron handles 4" (102 mm) size with necessary oxidised iron screws..	Each	126.49
		Each	126.49
175	Providing and fixing approved heavy type chromium plated iron handles 5" (127 mm) size with necessary screws	Each	171.07
		Each	171.07
176	Providing and fixing approved heavy type chromium plated iron 4" (102 mm) size with necessary screws .	Each	158.57
		Each	158.57
177	Providing and fixing with brass screws brass circular or curved 5/8" (16 mm) rod handles of approved section and design upto 5" (127 mm) dia as per direction of the Engineer-in-Charge .	Each	500.60
		Each	500.60
178	Providing and fixing with C.P. brass screws chromium plated circular or curved 5/8" (16 mm) rod handles of approved section and design upto 5" (127 mm) dia, as per direction of the Engineer-in-Charge .	Each	557.69
		Each	557.69

FITTINGS AND FIXTURES
SUB-HEAD CODE 121

S. No.	Description	Unit	Rate in Rs.
179	Providing and fixing approved heavy type fancy brass knob with plate and necessary screws .	Each	1,445.40
		Each	1,445.40
	HOOK AND EYE		
180	Providing and fixing approved size and design heavy type fancy brass pendulum type holder with plate and necessary screws .	Each	601.65
		Each	601.65
181	Providing and fixing approved brass section hook and eye 6" (152 mm) size.	Each	217.81
		Each	217.81
182	Providing and fixing approved brass section hook and eye 4" (102 mm) size.	Each	182.19
		Each	182.19
183	Providing and fixing approved oxidised brass section hook and eye 6" (152 mm) size .	Each	219.69
		Each	219.69
184	Providing and fixing approved oxidised brass section hook and eye 4" (102 mm) size .	Each	182.19
		Each	182.19
185	Providing and fixing approved galvanised iron hook and eye 6" (152 mm) size..	Each	125.94
		Each	125.94
186	Providing and fixing approved galvanised iron hook and eye 4" (102 mm) size.	Each	94.69
		Each	94.69
187	Providing and fixing approved oxidised iron hook and eye 6" (152 mm) size.	Each	132.19
		Each	132.19
188	Providing and fixing approved oxidised iron hook and eye 4" (102 mm) size .	Each	94.69
		Each	94.69
	FLOOR SOCKET		
189	Providing and fixing brass floor socket of approved size and section in floors for fixing tower bolts including cutting and making good the floor etc., complete .	Each	199.09
		Each	199.09
190	Providing and fixing aluminium floor socket of approved size and section in floors for fixing tower bolts including cutting and making good the floor etc.,	Each	161.59
		Each	161.59
191	Providing and fixing iron floor socket of approved size and section in floors for fixing tower bolts including cutting and making good the floor etc., complete .	Each	148.05
		Each	148.05

FINISHING

Code 122

FINISHING (S.H-122)

Brief Specification

CEMENT PLASTERING

The cement plaster shall be of cement sand mortars in proportion as defined in the item o work. For plaster to be done in salt bearing soils, sulphate resisting cement shall be used.

Mixing of mortar shall be carried out on properly cleaned water tight platform. Cement an sand will be mixed dry to a uniform colour. The water will then be added to get the desire consistency. The whole mix will then be shoveled a number of times to ensure proper mixing of th material.

Masonry walls on which plaster is to be applied directly shall be clean and dry, but befor applying the rendering coat, the surface must, be damped evenly to control, suction. The renderin coat shall be trowelled on hard and tight, being forced into, surface depressions to obtain permanent bond. The rendering coat will be allowed to set for two days before the second coat i applied.

Before applying the second coat the surface of the "rendering coat" shall be damped evenly The second coat will then be applied. It shall be brought to true even surface by treating it with wooden float.

The surface shall then be finished in a uniform manner to the desired texture.

If the plastered surface has to receive Neru plaster it shall be roughened by dragging a wir brush pressed against the surface. No extra payment will be made to the contractors for thicke plaster required due to any unevenness in the masonry work or any other surface. The contracto rate shall include rounding of corners such as junctions of walls, and that of walls with the ceiling jambs, etc. to the radius as per directions of the Engineer-in-Charge.

Curing will commence as soon as the plaster has hardened sufficiently not to be injured b applying water in a line spray. In order to prevent excessive evaporation on the sunny or windwar side of the building in hot dry weather matting or gunny bags should be hung over the side of th plaster and kept moist.

- Measurement shall be for the superficial area.

COLOUR CRETING / SNOW CRETING

Cement shall be of specified colour and approved make. If cement of approved shade is no available the contractor may be allowed to make the coloured cement by mixing approved pigment

Marble chips of approved quality shall be of the colour or colours mixed in particula proportion as specified in the schedule of quantities or as per direction of the Engineer-in-Charge The chips shall be of zero number unless otherwise directed.

The marble powder shall be free from all dust and dirt and shall be of approved quantity.

Preparation of surface:- The surface of over which the Colourcrete / Snowcrete is to b applied shall be well hacked or roughened to form a mechanical bond. The surface must be wel soaked with water. The water should be allowed to be, absorbed into the surface to be rendered an the first coat applied when there is just a slight amount of moisture left on the surface. The thicknes of the base coat shall be as specified in the schedule of quantities. The finishing coat of Colourcret / Snowcrete shall be applied 48 hours after applying the base coat.

The first coat shall be composed of ordinary Portland cement and sand in the proportio specified in the schedule of quantities. The coat shall be well pressed and deeply secured to th surface. The surface shall be well combed to provide a key for the following coat.

It shall be composed of marble chips, marble powder and Snowcrete / Colourcrete / Cemen mixed with Pigment, in the specified proportion. Before applying the finishing coat, the surface should be sufficiently wetted. Where provided in the schedule of quantities grooves of required dimensions shall be made with special tools all over the surface to sub-divide it into blocks of the dimensions shown in the drawing or as directed by the Engineer-in-Charge. The grooves must be uniform in depth and width through out being taken out in the approved shape. The grooves mus run horizontally and vertically to be exactly paralled and / or perpendicular to each other unless otherwise specified.

The surface must be cured for a period of 7 days in a suitable manner approved by the Engineer-in-Charges.

CEMENT POINTING

Cement sand may be mixed in proportion 1:3 as specified in item of work and in case of no mention ratio shall in less in the joints in the Masonry shall be raked & struck to the required depth and then cleaned and thoroughly wetted and all dirt and dust shall be brushed off.

Mortar shall be filled inside the joints and pressed with a pointing trowel. The joints shall be finished neatly such as to form deep ruled, flushed, weather struck or tuck and raised pointing as specified in the Schedule of quantities.

The practice of swearing mortar while pointing to cover defects in masonry shall not be allowed and after pointing the face of the work shall be cleaned off all surplus mortar adhering to the face no washing is to be done until the pointing has set.

The surface shall be kept wetted for a period of 7 days by sprinkling the water.

WHITE WASHING

The surface to be white washed shall be thoroughly cleaned of mortar drops and foreign matter by sand papering before white washing is applied. The white wash shall be prepared from fresh white lime of the best quality.

For old work, the patches and repair will be white washed first. One or more coats will then be applied on the entire surface till it presents s smooth and a uniform finish, the last coat being applied vertically.

Unslaked lime shall be placed in a large vessel full of water and shall be thoroughly mixed and stirred up with pole or rod until the mixture attains the consistency of thin cream. It will then be strained six chattaks of rice added for each cubic foot of lime. The required quantity of copper sulphate (blue) shall be added to prevent glare.

Each coat will be applied vertically and horizontally alternately to give a smooth, uniform finish. The finishing stroke will be applied vertically each operation of applying one horizontally and one vertically will be reckoned as one coat.

Each coat of white wash is to be allowed to dry and should be approved by the Assistan Engineer before applying the next. When dry, a coat of white wash should show no sign of cracking nor of coming off on contact or rubbing.

COLOUR WASHING

For new work, the surface shall be thoroughly cleaned and mortar drops and foreign matters by sand papering and the priming coat of white wash shall be applied in the manner specified in the white washing. The number of coats of colour wash as specified in th schedule of quantities will then be applied and the surface finished uniform and smooth.

For old work, the patches and repairs will be colour washed first. One or more coats wil then be applied on the entire surface till it presents a smooth and a uniform finish, the last coat bein applied vertically.

The colour wash is to be made in the same way as white wash, with the specific quantity o colouring matter added to bring out the desired shade on drying.

When completed, the walls must be of a uniform colour free from blotches and colour was must be such as will neither cracks nor come off on contact or rubbing.

For old work the patches and repairs will be white washed first. The number of coats o colour wash as specified in the schedule of quantities will then be applied on the entire surface til it presents a smooth and a uniform finish.

DISTEMPER

Distempers shall be of approved quantity and make as directed by the Engineer-in-Charge.

Before work of distempering is commenced, the surface should be cleaned. The surface the must be sized with a priming coat of petrifying liquid of approved manufacture. Distemper shall b applied quickly and Boldly with broad stiff brushed of approved make. The edges must be kep alive to prevent the finished surface being marred by laps. The brush is to be dipped and stroke cross-wise into the walls and then immediately stroked up and down. This shall be considered to b one coat of distempering. The distemper shall be mixed in the manner specified by the makers an each coat shall be inspected and passed by the Assistant Executive Engineer-in-Charge, before th next coat is applied. Distemper will not be allowed to be applied by brooms, etc. but must be applie with proper brush.

The contractor shall carry out as many coats as specified in the Schedule of Quantities. Th number of coats specified are enough for producing the uniform smooth finish if the finish produce by the contractor is not up to the satisfaction of the Engineer-in-Charge, the contractor will b required to give uniform finish and no payment of extra coats applied to produced the desire uniformity will be made.

SNOWCEM

Snowcem shall be obtained from approved manufacturers. It shall be obtained in sealed tin which shall be opened in the presence of the Engineer-in-Charge and used on the work. No furthe material whatsoever should be added to Snowcem. Only that much of quantity of Snowcem shoul be mixed which can be used in one hour.

Where required different colours may have to be mixed together to provide the desired shade This shall be mixed together by weighing. The weighed quantities to snowcem should be mixed a wet as possible by means of trowel on a clean mixing board after which it must be sieved throug 202 mesh sieve. This mixing with trowel and sieving may have to be required several times until trowel or spatula when passed over the surface of mixed snowcem of various colours, no streaks o any trace of separate colour remains.

The surface should be free from dust, dirt, lichen, algae, etc. Loose material and dirt must b removed by brushing or if necessary by washing, Grease, oil paints, varnishes, oil bound distemper limewash, etc. shall be completely removed.

Snowcem must be mixed in two stages. First by adding a little quantity of water to form paste and then further quantity of water being added to get a mix of liquid consistency.

The Snowcem should be applied with brushes of approved make and manufacture. The fir coat of snowcem shall be well rubbed into the surface by means of brushes and allowed to set for period of 24 hours. After 24 hours, the second coat shall be brushed in.

After two coats have been applied the surface should present a uniform smooth surface.

When the conditions permit it is desirable that Snowcem should be applied on the surfac which is not immediately exposed to the sun's rays.

PAINTING OVER WOOD WORK

The best quality of paint of an approved manufacture and packed in sealed containers sha be used. The painting shall be started only when all other works has been completed except whe tile flooring is to be done in which case the flooring shall be done after the painting and care bein taken to see that the surface is not spoiled by dust.

The paint shall be constantly stirred while being applied and will not be allowed to settle i the cans. The stirring must be done with smooth stick and not by the paint brushes.

The surface to be paint shall be thoroughly cleaned and dusted with dusting brushes befo painting is started. The wood work shall be painted only when thoroughly dry. The surface to b painted shall be finished smooth and rubbed thoroughly with sand paper first with 2-1/2 grade pap and then with 1-1/2 grade paper.

Before applying the priming coat, approved knotting shall be applied in 2 thin coats over a the knots. Knots in deodars and resinous wood must be painted over with hot lime which shall b scraped after 24 hours, rubbed over with pumice stone till smooth, over this prime coat one coat c knotting varnish shall be applied. If this does not kill the knot it may be coated with red and whi lead mixed in linseed oil and when quite dry rubbed with pumice stone. The knotting and primin shall be done before the wood work is fixed in place.

The dried primed surface shall be rubbed down with pumice stone and sand paper, then ma holes and other holes, dents and cracks shall be filled with an approved putty.

Ground whiting (powdered chalk) will be mixed with raw linseed oil as will make a sti paste. The paste will be kneaded and left for hours and then it will be worked up till quite soft an smooth. The whiteing should be perfectly dry and should pass through a sieve of 4 meshes to a inch.

PAINTING NEW WOOD WORK

Over the surface prepared in the manner described above the required number of coats sha be applied one after the other. Each coat should have thoroughly dried and should be got inspecte by the Assistant Executive Engineer before the next coat is applied. All successive coats of pai except the last should be gently and slightly rubbed down with sand paper after the coat has drie No hair marks from the brush shall be left on the work. The coats of paint should be spread smoothly and evenly as possible. After crossing the paint should be laid on in direction at rig angles to the crossing, but "with" the "grains" of the work, taking care that the crossing brush mark are not left with it.

PAINTING OLD WOOD WORK

Before painting, the surface shall be thoroughly cleaned with soap and water and all cracks and holes shall be filled up with putty. The old paint can be removed by Burning the paint preferably with a blow lamp and scraping or with a Paint Solvent as per direction o Engineer-in-Charge.

The surface shall then be brought up with three or more touchings with paint before th painting of the general surface is begun. As many coats as specified in the Schedule of Quantitie shall then be applied.

The contractor shall remove all stains, smear; splashes, droppings of every kind from floor glazing etc. at his own cost.

The rate shall included the cost of scaffolding ladders and other appliances required for th efficient execution of work.

PAINTING (IRON AND STEEL WORK)

The best quality of paint of an approved manufacture and packed in sealed containers sha be used. Utmost care being taken to see that the surface is not spoiled by dust.

The surface to be painted shall be thoroughly cleaned of all dust, scale, grease, rust, dirt etc by using a scraper or a steel wire brush. No chemical of any kind will be allowed to be used fo cleaning the metal. The surface over which the paint is to be applied shall be absolutely dry an approved quality of ready mixed primer shall then be applied over the surface.

PAINTING NEW IRON AND STEEL WORK

Over the prime surface the required number of coats shall be applied one after the othe Each coat should have thoroughly dried and should be got inspected by the Assistant Executiv Engineer before the next coat is applied. No hair marks from the brush shall be left on the work The coats of paints should be spread as smoothly and evenly as possible.

PAINTING OLD IRON AND STEEL WORK

All rust should be cleaned and removed completely. Grease should be removed with lim and water. The surface should be brought up with 3 or 4 touchings with paint. The specified numbe of coats shall then be applied in the manner.

When it is desired to thoroughly remove old paint and renew the paint afresh, the old pain may be removed burning the paint preferably with blow lamp and scraping or with a Paint Solver as per direction of the Engineer Incahrge..

The rate shall include the cost of scaffolding ladders and other appliances etc., required fo efficient execution of work.

The works of all kinds unless otherwise stated shall be measured by running the tap into a elevations and depressions, but doors and windows will be measured flat.

PAINTING OVER PLASTER SURFACE.

The surface to be painted shall be thoroughly cleaned of all dust, scales, grease, dirt etc., b using a scrapper of wire brush where necessary or by washing with Soda, if desired.

The surface over which the paint is to be applied, shall be absolutely dry.

NEW WORK

The surface to be painted shall be clear of all dust and dirt. A primer coat of an approve proprietary brand shall then be applied. The surface shall then be finished by applying the specifie number of coats of an approved paint.

As far as possible, the painting on freshly plastered surface should be avoided for a perio of atleast six months, as there is a danger of alkalies in the plaster bleaching the paint.

OLD WORK

-

The surface may be scrapped if necessary by any approved means as directed by th Engineer-in-Charge. The priming and the subsequent coats shall be applied in the manner specifie above.

The painted area only will be measured and paid for at the rates specified in the schedule o quantities.

DOORS AND WINDOWS ETC.

The contractor shall use approved wax polish, this polish shall be of the standard of mansio polish or equivalent as may be directed by the Engineer-in-Charge.

Before the work of wax polish starts, the surface shall be knotted and stopped in the manne specified in the item (Painting over wood work). The wax polish should be applied by means of pad strictly in accordance with the instructions issued by the manufactures unless otherwise directe by the Engineer-in-Charge.

The measurement shall be taken in the manner described in (Painting Wood Work).

Wax Polishing to Floors

Before applying wax polish the surface of the floor shall be knotted and stopped in th manner specified. Before applying the wax polish, the surface should be cleaned of all dirt and dust All dirty spots shall be cleaned with a soft cloth soaked with Benzine. A lump of the floor wax wil be placed on the floor and will be rubbed so that a thin layer of wax is left on the surface. This wil be rubbed so that a thin layer of wax is left on the surface. This will be allowed to remain for abou 20 minutes. The surface will then be rubbed briskly and the finishing will be done by using a clea soft piece of flannel or "Namda" cloth.

The measurement shall be taken for superficial area which has been actually polished an paid for at the unit rate provided in the schedule of quantities.

VARNISHING

The material shall be a clear and transparent varnish of approved make suitable for use o interior or exterior work as specified and shall give a uniform and glossy coatings free from run and specks. The colour shall be extra pale as specified.

The material shall become surface dry in not more than 6 hours for interior work and 8 hour for exterior work, and hard dry in not more than 18 hours.

The surface to be varnished will be made perfectly smooth with sand paper.

The surface shall then be knotted in the manner under the item of (Painting Wood work).

The surface of the wood will then be stopped with hot weak glue size (a pound of glu making I gallon of size) in order to close up the pores, cracks dents etc. The surface when dry shal again be well sand papered.

The varnish shall then be applied in very thin coats with special fine haired varnishin brushes. The second coat should be applied only after the first has become hard.

The measurements shall be taken in the manner described for (Painting over Wood work).

FRENCH POLISHING

French Polish used on the work shall be of approved make and will be subject to the approv of the Engineer-in-Charge.

The surface of French Polish should be knotted and stopped in the manner specified f (Painting over Wood Work). The surface should then be sand papered and a coat of filler compou should be applied.

The measurement shall be taken in the manner specified for (Painting over Wood Work).

Rate shall cover all the requirements of the work as included in the nomenclature of schedu of items of the contract and a specified in this chapter, i.e. cost of all labour and material includi scaffolding, tools and plants etc.

PAKISTAN PUBLIC WORKS DEPARTMENT

FINISHING

SUB-HEAD CODE 122

S. No.	Description	Unit	Rate in Rs.
	A) **CEMENT SAND PLASTER**		
1	1/4" (6.4 mm) thick cement plaster 1:3 on soffits of ceiling, cantilever slabs, sides and soffits of beams etc., in basement, mezzanine and ground floor including making edges, corners and curing etc., complete .	100 Sq.ft. Sq.m.	4,014.70 432.14
2	1/4" (6.4 mm) thick cement plaster 1:4 on soffits of ceiling, cantilever slabs, sides and soffits of beams etc., in basement, mezzanine and ground floor including making edges, corners and curing etc., complete .	100 Sq.ft. Sq.m.	3,852.59 414.69
3	1/2" (13 mm) thick cement plaster 1:3 on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners, and curing etc., complete.	100 Sq.ft. Sq.m.	4,707.17 506.68
4	1/2" (13 mm) thick cement plaster 1:4 on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners, and curing etc., complete .	100 Sq.ft. Sq.m.	4,381.84 471.66
5	1/2" (13 mm) thick cement plaster 1:5 on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners, and curing etc., complete..	100 Sq.ft. Sq.m.	4,199.45 452.02
6	1/2" (13 mm) thick cement plaster 1:6 on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners, and curing etc., complete.	100 Sq.ft. Sq.m.	4,034.92 434.31
7	3/4" (19 mm) thick cement plaster 1:3 on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners, and curing etc., complete.	100 Sq.ft. Sq.m.	5,798.75 624.17
8	3/4" (19 mm) thick cement plaster 1:4 on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners, and curing etc., complete.	100 Sq.ft. Sq.m.	5,335.06 574.26
9	3/4" (19 mm) thick cement plaster 1:5 on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners, and curing etc., complete	100 Sq.ft. Sq.m.	5,061.79 544.85
10	3/4" (19 mm) thick cement plaster 1:6 on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners, and curing etc., complete	100 Sq.ft. Sq.m.	4,815.28 518.31
11	1" (25 mm) thick cement plaster 1:3 on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners, and curing etc., complete.	100 Sq.ft. Sq.m.	7,460.78 803.07

FINISHING
SUB-HEAD CODE 122

S. No.	Description	Unit	Rate in Rs.
12	1" (25 mm) thick cement plaster 1:4 on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners, and curing etc.,complete.	100 Sq.ft. Sq.m.	6,810.67 733.09
13	1" (25 mm) thick cement plaster 1:5 on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners, and curing etc., complete.	100 Sq.ft. Sq.m.	6,446.20 693.86
14	1" (25 mm) thick cement plaster 1:6 on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners, and curing etc., complete.	100 Sq.ft. Sq.m.	6,117.42 658.47
15	1-1/4" (32 mm) thick cement plaster 1:4 in two layers on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners, and curing etc., complete .	100 Sq.ft. Sq.m.	10,533.00 1,133.76
16	1-1/4" (32 mm) thick cement plaster 1:5 in two layers on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners, and curing etc., complete .	100 Sq.ft. Sq.m.	10,066.41 1,083.54
17	1-1/4" (32 mm) thick cement plaster 1:6 in two layers on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners, and curing etc., complete .	100 Sq.ft. Sq.m.	9,645.51 1,038.23
18	1-1/2" (38 mm) thick cement plaster 1:4 in two layers on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners, and curing etc., complete .	100 Sq.ft. Sq.m.	10,733.24 1,155.32
19	1-1/2" (38 mm) thick cement plaster 1:5 in two layers on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners, and curing etc., complete .	100 Sq.ft. Sq.m.	10,186.70 1,096.49
20	1-1/2" (38 mm) thick cement plaster 1:6 in two layers on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners, and curing etc., complete .	100 Sq.ft. Sq.m.	9,693.68 1,043.42
21	Providing ornamental moulding of approved design all the junction of slabs and walls etc. in cement mortar 1:3 average thickness 1-1/8" or 29 mm (1" or 25 mm under coat and 1/8" or 3.2 mm finishing layer) including curing etc. complete in any floor.	100 Sq.ft. Sq.m.	40,474.53 4,356.64
22	Providing and applying 3/4" (19 mm) thick rough cast cement rendering consisting of 3/8" or 9.6 mm topping of 1:2 (one cement and two mixed graded bajri 3/8" or 9.5 mm and down gauge) and base of 3/8" or 9.5 mm thick rough plaster 1:4 (one cement four sand) in plinth and ground floor including finishing etc. complete .	100 Sq.ft. Sq.m.	6,709.56 722.21

FINISHING

SUB-HEAD CODE 122

S. No.	Description	Unit	Rate in Rs.
23	Cement rendering on all kind of cemented and plastered surface including rubbing smooth complete with curing etc. in ground floor.	100 Sq.ft. Sq.m.	1,446.73 155.73
24	Providing 3/4" (19 mm) thick ornamental plaster with 1:3 cement mortar on walls, columns and slabs finished smooth in basement, plinth mezzanine and ground floor including curing etc., complete .	100 Sq.ft. Sq.m.	21,776.23 2,343.97
25	Making drip course 1/2" x 3/8" (13 mm x 9.5 mm) size under R.C.C. or C.C. coping and chajja etc. complete in all floors including cost of extra cement mortar 1:3 and curing etc., complete .	100 Rft. Ru.m.	1,873.46 61.47
26	Making 1/2" (13 mm) thick plaster band 4" to 6" (102 mm to 152 mm) wide with 1:4 cement mortar in all floors including curing etc. complete.	100 Rft. Ru.m.	4,327.59 141.98
27	Making 1/2" (13 mm) thick plaster band below4" (102 mm) wide with 1:4 cement mortar in all floors including curing etc. complete.	100 Rft. Ru.m.	3,468.12 113.78
28	Providing and mixing water proofing agent cemto in cement mortar of any description in any floor ..	Lbs. kg	257.50 567.69
29	Providing and mixing water proofing agent cemcon in cement mortar of any description in any floor..	Imgl. Litre.	1,237.50 272.21
30	Providing and mixing water proofing agent puddlo in cement mortar of any description in any floor.	Lbs. kg	81.33 179.31
31	Providing and mixing retarding agent of approved manufacture in cement mortar of any description in any floor.	Imgl. Litre	2,568.75 565.05
32	Providing and mixing accelerating, agent of approved manufacture in cement mortar of any description in any floor .	Imgl. Litre	1,070.00 235.37
33	Providing and mixing wetting agent of approved manufacture in cement mortar of any description in any floor.	Imgl. Litre	3,007.50 661.56
34	Extra if false pointing is required with lime surkhi or pigment on plastered surface of any description in any floor.	100 Sq.ft. Sq.m.	2,502.46 269.36
35	Extra if ruled pointing is required to give stone appearance on plastered surface of any description in any floor .	100 Sq.ft. Sq.m.	1,173.75 126.34
36	Extra if ruled pointing is required to give brick appearance on plastered surface of any description in any floor .	100 Sq.ft. Sq.m.	1,972.50 212.32
37	Extra if deep cut grooves of approved sizes and design are made on plastered surface of any description in any floor	100 Sq.ft. Sq.m.	2,287.50 246.22

FINISHING

SUB-HEAD CODE 122

S. No.	Description	Unit	Rate in Rs.
38	Providing and mixing pigment of approved manufacture in cement mortar of any description in any floor .	Lbs.	346.88
		kg	764.73
39	Extra for using washing soda in cement mortar of any description in any floor.	Lbs.	64.38
		kg	141.92
40	Extra for plaster of any description for overhead tanks upto 20 ft. (6.1 m) height .	100 Sq.ft.	1,020.63
		Sq.m.	109.86
41	Extra for plaster of any description for overhead tanks for every additional 5 ft. (1.52 m) height or a part thereof..	100 Sq.ft.	416.25
		Sq.m.	44.80

B) METAL LATHING CEMENT PLASTER

S. No.	Description	Unit	Rate in Rs.
42	Providing and fixing expanded metal or wire net lathing with 3/4" (19 mm) cement plaster 1:4 in 3 layers including curing etc. complete in any floor with expanded metal 2-1 /2" x 3/4" x 12 gauge (64 mm x 1 9 mm x 2.11 mm).	100 Sq.ft.	32,030.35
		Sq.m.	3,447.71
43	Providing and fixing expanded metal or wire net lathing with 3/4" (19 mm) cement plaster 1:4 in 3 layers including curing etc., complete in any floor with wire-netting 1-1/2" (38 mm) mesh x 18 gauge (1,41 mm) .	100 Sq.ft.	23,287.56
		Sq.m.	2,506.65

C) LIME CEMENT PLASTER

S. No.	Description	Unit	Rate in Rs.
44	1/2" (13 mm) thick lime cement plaster 1:1:6 (one lime, one cement and six sand) on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners and curing etc., complete .	100 Sq.ft.	4,357.60
		Sq.m.	469.05
45	3/4" (19 mm) thick lime cement plaster 1:1:6 (one lime, one cement and six sand) on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners and curing etc., complete .	100 Sq.ft.	5,298.74
		Sq.m.	570.35
46	1" (25 mm) thick lime cement plaster 1:1:6 (one lime, one cement and six sand) on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners and curing etc., complete .	100 Sq.ft.	6,762.23
		Sq.m.	727.88
47	1/4" (6.4 mm) thick lime niru plaster 1:2 (one lime and two sand) mixed wrth 10% cement and hessians @ 3 Lbs. per 100 Sft. (0.146 Kg/sqm) on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges and corners as desired curing etc. complete..	100 Sq.ft.	3,936.25
		Sq.m.	423.69
48	Providing 3/4" (19 mm) thick lime cement plaster 1:1:3 (one lime, one cement and three sand) ornamental plaster on walls, columns and slabs finished smooth in basement, mezzanine and ground floor including curing etc., complete on internal surface.	100 Sq.ft.	22,509.81
		Sq.m.	2,422.93

FINISHING

SUB-HEAD CODE 122

S. No.	Description	Unit	Rate in Rs.
49	Providing ornamental moulding or approved design at the junction of slabs and walls etc. in lime cement mortar 1:1:3 average thickness 1-1/8" or 29 mm (1" or 25 mm under coat and 1/8" or 3.2 mm finishing layer) including curing etc.,complete in any floor..	100 Sq.ft. Sq.m.	23,690.75 2,550.05
50	Providing and mixing approved animal hair free from grease and all sorts of impurities in plaster of any description in any floor.	Lbs. Kg	168.75 372.03
51	Providing and mixing manila fibre free from all impurities in plaster of any description in any floor.	Lbs. Kg	112.50 248.02
52	3/4" (1 9 mm) thick lime plaster of marble shade consisting of 1/2" (13 mm) thick under layer of cement plaster 1:4 with, 1/4" (6-4 mm) thick coat of lime marble, fine dust and stone dust in the ratio 2:1:1 (two lime one fine marble dust and one stone dust) on walls and columns etc. in plinth, mezzanine and ground floor including making edges, corners, curing, finishing rubbing and polishing with glass pieces etc., complete.	100 Sq.ft. Sq.m.	16,414.47 1,766.84
	D) LIME SURKHI PLASTER		
53	1/2" (13 mm) thick lime surkhi plaster 1:2 on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners and curing etc. complete .	100 Sq.ft. Sq.m.	4,023.37 433.07
54	3/4" (19 mm) thick lime surkhi plaster 1:2 on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners and curing etc. complete.	100 Sq.ft. Sq.m.	5,049.94 543.57
55	1" (25 mm) thick lime surkhi plaster 1:2 on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners and curing etc. complete ..	100 Sq.ft. Sq.m.	6,094.33 655.99
56	1-1/4" (32 mm) thick lime surkhi plaster 1:2 on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners and curing etc. complete .	100 Sq.ft. Sq.m.	9,627.82 1,036.33
57	1-1/2" (38 mm) thick lime surkhi plaster 1:2 on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners and curing etc. complete	100 Sq.ft. Sq.m.	10,643.42 1,145.65
58	1/4" (6.4 mm) thick lime surkhi niru plaster 1:2 on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners and curing etc. complete .	100 Sq.ft. Sq.m.	4,678.41 503.58

FINISHING

SUB-HEAD CODE 122

S. No.	Description	Unit	Rate in Rs.
	E) GYPSUM PLASTER		
59	Providing and applying 1 /2" (13 mm) thick under coat with cement, lime and sand in 1:2:9 (one cement, two lime putty and nine sand) for plaster of paris of gypsum plaster in basement, mezzanine and ground floor including curing etc., complete	100 Sq.ft. Sq.m.	4,023.37 433.07
60	Providing and applying 1 /2" (13 mm) thick under coat with cement, lime and sand in 1:2:6 (one cement, two lime putty and six sand) for plaster of paris or gypsum piaster in basement, mezzanine and ground floor including curing etc., complete .	100 Sq.ft. Sq.m.	4,381.73 471.64
61	Providing and applying 1/2" (13 mm) thick under coat with cement, lime and sand in 1:3 (one cement three sand) for plaster of paris or gypsum piaster in basement, mezzanine and.ground floor including curing etc., complete .	100 Sq.ft. Sq.m.	4,707.17 506.68
62	Providing and fixing gypsum board 1/4" (6;4 mm) thick with wire nails to wooden frame to receive gypsum plaster finishing coat in basement, mezzanine and ground floor but excluding the cost of wooden frame .	100 Sq.ft. Sq.m.	9,787.50 1,053.52
63	Providing and fixing gypsum board 3/8" (9.5 mm) thick with wire nails to wooden frame to receive gypsum plaster finishing coat in basement, mezzanine and ground floor but excluding cost of wooden frame .	100 Sq.ft. Sq.m.	11,756.25 1,265.43
64	Providing and fixing gypsum board 1/2" (13 mm) thick with wire nails to wooden frame to receive gypsum plaster finishing coat in basement, mezzanine and ground floor but excluding tne cost of wooden frame .	100 Sq.ft. Sq.m.	15,037.50 1,618.62
65	Extra for perforated gypsum plaster board of any description over item No. 62 to 64 .	100 Sq.ft. Sq.m.	3,750.00 403.65
66	Providing and fixing insulating fibre board 1/2" (13 mm) thick with wire nails to wooden frame to receive gypsum plaster finishing coat in basement, mezzanine and ground floor but excluding the cost of wooden frame	100 Sq.ft. Sq.m.	45,881.25 4,938.61
66	Providing and applying 1 /4" (6.4 mm) thick gypsum plaster 4:1 (four parts lime putty and one part gypsum) over a prepared base coat in basement, mezzanine and ground floor,complete but excluding the cost of base coat ..	100 Sq.ft. Sq.m.	2,759.75 297.06
68	Providing and applying 1 /4" (6.4 mm) thick gypsum plaster 3:1 (three parts lime putty and one part gypsum) over a prepared base coat in basement, mezzanine and ground floor complete but excluding the cost of base coat ..	100 Sq.ft. Sq.m.	3,950.52 425.23

S. No.	Description	Unit	Rate in Rs.
	F) BARIUM BASED PLASTER (INTERIOR SURFACE ONLY)		
69	Providing and applying 1/4" (6.4 mm) thick barium based plaster with one part of cement, one part barytes (barium sulphate) fines and three parts sand in basement, mezzanine and ground floor with curing etc., complete ..	100 Sq.ft.	20,975.38
		Sq.m.	2,257.77
70	Providing and applying 3/8" (9.5 mm) thick barium based plaster with one part of cement, one part barytes (barium sulphate) fines and three parts sand in basement, mezzanine and ground floor with curing etc., complete ..	100 Sq.ft.	30,307.88
		Sq.m.	3,262.31
71	Providing and applying 1/2" (13 mm) thick barium based plaster with one part of cement, one part barytes (barium sulphate) fines and three parts sand in basement, mezzanine and ground floor with curing etc., complete ..	100 Sq.ft.	39,724.63
		Sq.m.	4,275.92
72	Providing and applying 3/4" (19 mm) thick barium based plaster with one part of cement, one part barytes (barium sulphate) fines and three parts sand in basement, mezzanine and ground floor with curing etc., complete ..	100 Sq.ft.	58,279.38
		Sq.m.	6,273.13
73	Providing and applying 1" (25 mm) thick barium based plaster with one part of cement, one part barytes (barium sulphate) fines and three parts sand in basement, mezzanine and ground floor with curing etc., complete ..	100 Sq.ft.	77,417.00
		Sq.m.	8,333.09
74	Extra for plaster of any description in 2 layers in item Nos. 72 and 73 .	100 Sq.ft.	1,500.00
		Sq.m.	161.46
75	Providing and making artificial marble facing 3/8" (9.5 mm) thick on walls, columns and moulding etc., in white cement mortar 1:3 (one white cement and three marble powder) with required pigment in plinth, mezzanine and ground floor including curing, rubbing and polishing etc., complete	100 Sq.ft.	16,493.48
		Sq.m.	1,775.34
76	Snow-creting 1/4" (6.4 mm) thick 1:1:2 (1 white cement, 1 marble powder and 2 marble chip zero No.) including dragging surface with wire-brushes complete with curing etc. over a base of 3/4' (19 mm) thick cement plaster 1:3 in plinth, mezzanine and ground floor including the cost of base course as directed complete but excluding the cost of grooves or joints if provided.	100 Sq.ft.	13,016.88
		Sq.m.	1,401.12
77	Colour-creting 1/4" (6.4 mm) thick 1:1:2 (1 white cement mixed with pigment, 1 marble powder and 2 marble chips zero No.) in required shade including dragging the surface with wire brushes complete with curing etc. over a base of 3/4" (19 mm) thick cement plaster 1:3 in plinth, mezzanine and ground floor including the cost of base course as directed complete but excluding the cost of grooves or joints if provided .	100 Sq.ft.	16,512.50
		Sq.m.	1,777.39

FINISHING

SUB-HEAD CODE 122

S. No.	Description	Unit	Rate in Rs.
78	Providing and applying 1/4" (6.4 mm) 1:1:2 (1 white cement mixed with pigment, 1 marble powder and 2 marble chips zero No.) colour crete in any shade over a prepared base work of 3/4" (19 mm) thick cement plaster 1:3 in plinth, mezzanine and ground floor including chiselling the surface to give texture of stone including the cost of base course etc., complete but excluding the cost of grooves or joints if provided .	100 Sq.ft. Sq.m.	21,762.50 2,342.49
79	Providing and applying colour crete 1/4" (6.4 mm) 1:1:2 (1 white cement mixed with pigment, 1 marble powder and 2 marble chips zero No.) including dragging the surface with wire brush complete with curing etc., over base of 3/4" (19 mm) thick cement plaster 1:3 in plinth, mezzanine and ground floor including chiselling the surface to give texture of stone including the cost of base course etc. complete but excluding the cost of grooves or joints if provided ..	100 Sq.ft. Sq.m.	18,387.50 1,979.21
80	1/2" (13 mm) thick rendering with properly washed and scrubbed marble stones of approved sizes and mixed in approved shade and ratio and laid by machine over base of 1 /2" (13 mm) thick 1:4 cement plaster with 1 /4"(6.4 mm) thick 1:1 (1 part cement and 1 part sand) rendering including brushing the loose stone chips and rendering again to cover the cement back ground curing etc., complete including the cost of base courses but excluding the cost of joints or grooves if provided as directed by the Engineer-in-Charge in plinth, mezzanine and ground floor	100 Sq.ft. Sq.m.	15,856.79 1,706.81
81	1/2" (13 mm) thick rendering with properly washed and scrubbed selected shingles of approved sizes laid by machine over base of 1/2" (13 mm) thick 1:4 cement plaster with 1/4" (6.4 mm) thick 1:1 (1 part cement and 1 part sand) rendering including brushing the loose stone chips and rendering again to cover the cement back ground curing etc., complete including the cost of base courses but excluding the cost of joints or grooves if provided as directed by the, Engineer-in-Charge in plinth, mezzanine and ground floor	100 Sq.ft. Sq.m.	15,234.92 1,639.87
82	Extra for providing and using pigment of required colour over item No. 79	Lbs. Kg	337.50 744.06
83	Extra for providing horizontal or vertical joints or grooves 3/8" x 1/4" (9.5 mm x 6.4 mm) size of approved design over item No. 76 to 81	100 Sq.ft. Sq.m.	1,575.00 169.53
	G) MUD PLASTER		
84	3/4" (19 mm) thick mud plaster on walls mixed with cowdung, bhusa and clay using 1 part clay, 1 part cowdung and bhusa at 5 Lbs. per Cft. (80 Kg/cum) of clay in basement; plinth and ground floor complete .	100 Sq.ft. Sq.m.	3,341.60 359.69
85	1" (25 mm) thick mud plaster on walls mixed with cowdung, bhusa and clay using 1 part clay, 1 part cowdung and bhusa at 5 Lbs. per Cft. (80 Kg/cum) of clay in basement, plinth and ground floor complete	100 Sq.ft. Sq.m.	4,220.05 454.24
86	1-1/4" (32 mm) thick mud plaster on walls mixed with cowdung, bhusa and clay using 1 part clay, 1 part cowdung and bhusa at 5 Lbs. per Cft. (80 Kg/cum) of clay in basement, plinth and ground floor complete .	100 Sq.ft. Sq.m.	4,801.62 516.84

FINISHING
SUB-HEAD CODE 122

S. No.	Description	Unit	Rate in Rs.
	H) EXTRA FOR FLOORS		
87	Extra for **first floor** for plaster, base course, snowcrete, colourcrete, rendering and finishing etc. of any description where total thickness **upto 1/2"**	100 Sq.ft. Sq.m.	307.50 33.10
88	Extra for **first floor** for plaster, base course, snowcrete, colourcrete. rendering and finishing etc. of any description where total thickness **more than 1/2" upto 1" (13 mm upto 25 mm)...**	100 Sq.ft. Sq.m.	410.00 44.13
89	Extra for **first floor** for plaster, base course, snowcrete, colourcrete, rendering and finishing etc. of any description on where total thickness **more than 1-1 /2" (38 mm) .**	100 Sq.ft. Sq.m.	640.63 68.96
90	Extra for plaster, base course, snowcrete, colourcrete rendering and finishing etc. of any description in every **additional floor** above first floor where total thickness **upto 1/2" (13 mm)..**	100 Sq.ft. Sq.m.	236.25 25.43
91	Extra for plaster, base course. snowcrete, colourcrete rendering and finishing etc. of any description in every **additional floor** above first floor where total thickness **more than 1/2" upto 1" (13 mm upto 25 mm).**	100 Sq.ft. Sq.m.	315.00 33.91
92	Extra for plaster, base course, snowcrete, colourcrete rendering and finishing etc. of any description in every **additional floor** above first floor where total thickness **more than 1" upto 1-1/2" (25 mm upto 38 mm)** .	100 Sq.ft. Sq.m.	498.13 53.62
93	Extra for **ground floor** for plaster, base course, snowcrete, colourcrete rendering and finishing etc. of any description for curved surface where total thickness **upto 1/2" (13 mm) .**	100 Sq.ft. Sq.m.	796.88 85.77
94	Extra for **ground floor** for plaster, base course, snowcrete, colourcrete rendering and finishing etc. of any description for **curved surface** where total thickness **more than 1/2" upto 1" (13 mm upto 25 mm)...**	100 Sq.ft. Sq.m.	1,051.88 113.22
95	Extra for **ground floor** for plaster, base course, snowcrete, colourcrete rendering and finishing etc. of any description for **curved surface** where total thickness more **than 1: upto 1-1/2" (25 mm up to 38 mm)...**	100 Sq.ft. Sq.m.	1,306.88 140.67
96	Extra for plaster, base course, snowcrete, colourcrete rendering and finishing etc. of any description for **curved surface** in every **additional floor** over ground floor where total thickness **upto 1/2" (13 mm)..**	100 Sq.ft. Sq.m.	453.13 48.77

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S. No.	Description	Unit	Rate in Rs.
97	Extra for plaster, base course, snowcrete, colourcrete rendering and finishing etc. of any description for **curved surface** in every **additional floor** over ground floor on items No. 1 to 20, 22, 23, 24, 44 to 48, 52 to 64, 66 to 73, 75 to 81 and 84 to 86: Total thickness **more than 1/2" upto 1' (13 mm upto 25 mm)..**	100 Sq.ft. Sq.m.	598.13 64.38
98	Extra for plaster, base course, snowcrete, colourcrete rendering and finishing etc. of any description for **curved surface** in every **additional floor** over ground floor where total thickness **,more than 1" upto 1-1/2" (25 mm upto**	100 Sq.ft. Sq.m.	743.13 79.99
	I) CEMENT POINTING ON BRICK WORK		
99	Flush pointing on brick work with cement mortar 1:3 (one cement and 3 sand) in plinth and ground floor including raking, out joints, curing etc., complete .	100 Sq.ft. Sq.m.	2,479.68 266.91
100	Deep ruled pointing on brick work with cement mortar 1:3 (one cement 3 sand) in plinth and ground floor including raking, out joints, curing etc., complete .	100 Sq.ft. Sq.m.	2,866.45 308.54
101	Tuck or weather struck pointing on brick work with cement mortar 1:3 (one cement and three sand) in plinth and ground floor including raking out joints, curing etc., complete..	100 Sq.ft. Sq.m.	3,449.57 371.31
102	Extra for pointing of any description in first floor	100 Sq.ft. Sq.m.	439.38 47.29
103	Extra for pointing of any description in every additional floor above first floor.	100 Sq.ft. Sq.m.	332.50 35.79
	J) CEMENT POINTING ON CEMENT CONCRETE BLOCK WORK		
104	Flush pointing on cement concrete block work with cement mortar 1:3 (one cement and three sand) in plinth and ground floor including raking, out Joints, curing etc., complete .	100 Sq.ft. Sq.m.	1,559.79 167.89
105	Deep ruled pointing on cement concrete block work with cement mortar 1:3 (one cement and three sand) in plinth and ground floor including raking, out joints, curing etc., complete.	100 Sq.ft. Sq.m.	1,904.05 204.95
106	Tuck or weather struck pointing on cement concrete block work with cement mortar 1:3 (one cement three sand) in plinth and ground floor including raking out joints curing etc., complete .	100 Sq.ft. Sq.m.	2,159.05 232.40
107	Extra for first floor.	100 Sq.ft. Sq.m.	368.13 39.62
108	Extra for every additional floor above first floor	100 Sq.ft. Sq.m.	273.13 29.40

S. No.	Description	Unit	Rate in Rs.
	K) CEMENT SAND POINTING ON STONE WORKS		
109	Flush pointing on stone work with cement mortar 1:3 (one cement and three sand) in plinth and ground floor including raking out joints.curing etc., complete .	100 Sq.ft. Sq.m.	2,208.63 237.73
110	Deep ruled pointing on stone work with cement mortar 1:3 (one cement and three sand) in plinth and ground floor including raking out joints,curing complete.	100 Sq.ft. Sq.m.	2,552.89 274.79
111	Tuck or weather struck pointing on stone work with cement mortar 1:3 (one cement and three sand) in plinth and ground floor including raking, out joints, curing, etc., complete.	100 Sq.ft. Sq.m.	2,850.39 306.81
112	Raised or cut pointing on stone work with cement mortar 1:3 (one cement and three sand) in plinth and ground floor including raking, out joints, curing, etc., complete .	100 Sq.ft. Sq.m.	3,105.39 334.26
113	Extra for first floor	100 Sq.ft. Sq.m.	593.75 63.91
114	Extra for every additional floor above first floor	100 Sq.ft. Sq.m.	451.25 48.57
	L) LIME SAND POINTING ON BRICK WORK		
115	Flush pointing on brick work with lime mortar 1:2 (one lime and two sand) in plinth and ground floor including raking out joints, curing, etc., complete .	100 Sq.ft. Sq.m.	2,318.06 249.51
116	Tuck or weather struck pointing on brick work with lime mortar 1:2 (one lime and two sand) in plinth and ground floor including raking, out joints, etc., complete .	100 Sq.ft. Sq.m.	2,897.42 311.88
117	Deep ruled pointing on brick work with lime mortar 1:2 (one lime and two sand) in plinth and ground floor including raking, out joints, curing, etc., complete .	100 Sq.ft. Sq.m.	2,642.42 284.43
118	Extra for pointing of any description in first floor	100 Sq.ft. Sq.m.	439.38 47.29
119	Extra for pointing work of any description in every additional floor above first floor	100 Sq.ft. Sq.m.	332.50 35.79
	M) LIME SAND POINTING ON STONE WORK		
120	Flush pointing on stone work with lime mortar 1:2 (one lime and two sand) in plinth and ground floor including raking, out joints, curing, etc., complete .	100 Sq.ft. Sq.m.	2,042.98 219.90
121	Tuck or weather struck pointing on stone work with lime mortar 1:2 (one lime and two sand) in plinth and ground floor including raking, out joints, curing, etc., complete ...	100 Sq.ft. Sq.m.	2,622.34 282.27

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S. No.	Description	Unit	Rate in Rs.
122	Ruled pointing on stone work with lime mortar 1:2 (one lime and two sand) in plinth and ground floor including raking, out joints, curing, etc., complete	100 Sq.ft. Sq.m.	2,438.59 262.49
123	Extra for pointing of any description in first floor	100 Sq.ft. Sq.m.	593.75 63.91
124	Extra for pointing of any description in every additional floor above first floor	100 Sq.ft. Sq.m.	451.25 48.57
	N) CEMENT SAND POINTING ON STONE WORK		
125	Flush pointing on stone work with cement mortar 1:2 (one cement and two sand) in plinth and ground floor including raking out joints, curing etc., complete	100 Sq.ft. Sq.m.	2,390.47 257.31
126	Tuck or weather struck pointing on stone work with cement mortar 1:2 (one cement and two sand) in plinth and ground floor including raking, out joints, curing etc., complete	100 Sq.ft. Sq.m.	3,014.38 324.46
127	Raised or cut pointing on stone work with cement sand mortar 1:2 (one cement and two sand) in plinth and ground floor including raking, out joints, curing, etc., complete	100 Sq.ft. Sq.m.	3,425.79 368.75
128	Deep ruled pointing on stone work with cement mortar 1:2 (one cement and two sand) in plinth and ground floor including raking, out Joints, curing, etc., complete .	100 Sq.ft. Sq.m.	2,759.38 297.02
129	Extra for pointing of any description in first floor	100 Sq.ft. Sq.m.	593.75 63.91
130	Extra for pointing of any description in every additional floor above first floor	100 Sq.ft. Sq.m.	451.25 48.57
	O) LIME SURKHI POINTING ON BRICK WORK		
131	Flush pointing on brick work with lime surkhi mortar 1:2 (one lime and two surkhi) in plinth and ground floor including raking, out joints, curing, etc., complete .	100 Sq.ft. Sq.m.	2,247.49 241.92
132	Tuck or weather struck pointing on brick work with lime surkhi mortar 1:2 (one lime and two surkhi) in plinth and ground floor including raking, out joints, curing, etc., complete .	100 Sq.ft. Sq.m.	2,859.98 307.85
133	Deep ruled pointing on brick work with lime surkhi mortar 1:2 (one lime and two surkhi) in plinth and ground floor including raking, out joints, curing etc., complete .	100 Sq.ft. Sq.m.	2,604.98 280.40
134	Extra for pointing of any description in first floor	100 Sq.ft. Sq.m.	439.38 47.29
135	Extra for pointing of any description in every additional floor above first floor.	100 Sq.ft. Sq.m.	344.38 37.07

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S. No.	Description	Unit	Rate in Rs.
	P) LIME CEMENT POINTING ON BRICK WORK		
136	Flush pointing on brick work with cement lime mortar 1:1:3 (one cement, one lime and three sand) in plinth and ground floor including raking, out joints, curing etc., complete .	100 Sq.ft.	2,592.63
		Sq.m.	279.07
137	Tuck or weather struck pointing on brick work with cement lime mortar 1:1:3 (one cement, one lime and three sand) in plinth and ground floor including raking, out Joints, curing, etc., complete .	100 Sq.ft.	3,543.50
		Sq.m.	381.42
138	Deep ruled pointing on brick work with lime surkhi mortar 1:1:3 (one cement, one lime and three sand) in plinth and ground floor including raking, out joints, curing, etc., complete .	100 Sq.ft.	2,960.38
		Sq.m.	318.65
139	Extra for pointing of any description in first floor	100 Sq.ft.	439.38
		Sq.m.	47.29
140	Extra for pointing of any description in every additional floor above first floor	100 Sq.ft.	332.50
		Sq.m.	35.79
	Q) LIME CEMENT POINTING ON STONE WORK		
141	Flush pointing on stone with cement lime mortar 1:1:3 (one cement, one lime and three sand) in plinth and ground floor including raking, out joints, curing, etc., complete.	100 Sq.ft.	2,373.00
		Sq.m.	255.43
142	Tuck or weather struck pointing on stone work with cement lime mortar 1:1:3 (one cement, one lime and three sand) in plinth and ground floor including raking, out joints, curing etc., complete .	100 Sq.ft.	2,995.75
		Sq.m.	322.46
143	Raised or cut pointing on stone work with cement lime mortar 1:1:3 (one cement, one lime and three sand) in plinth and ground floor including raking, out joints, curing, etc., comptete	100 Sq.ft.	3,406.00
		Sq.m.	366.62
144	Deep ruled pointing on stone work with cement lime mortar 1:1:3 (one cement, one lime and three sand) in plinth and ground floor including raking, out joints, curing, etc., complete .	100 Sq.ft.	2,740.75
		Sq.m.	295.01
145	Extra for pointing of any description in first floor	100 Sq.ft.	593.75
		Sq.m.	63.91
146	Extra for pointing of any description in every additional floor above first floor	100 Sq.ft.	451.25
		Sq.m.	48.57

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S. No.	Description	Unit	Rate in Rs.
	R) WHITE WASH, COLOUR WASH ETC.		
147	White washing three coats at any height in any floor..	100 Sq.ft.	1,253.06
		Sq.m.	134.88
148	Chalk washing three coats at any height in any floor.	100 Sq.ft.	550.16
		Sq.m.	59.22
149	Colour washing two coats over and including ffie cost of one priming coat of lime wash at any height in any floor..	100 Sq.ft.	1,288.87
		Sq.m.	138.73
150	Cement washing two coats at any height in any floor.......	100 Sq.ft.	304.38
		Sq.m.	32.76
151	Distempering with vinyle distemper (ICI) Dulux Paintex of approved make and shade in two coats over and including the cost of wall putti, sand papering, dusting, and filling the holes, cracks and inequalities, if any, at any height in any floor.	100 Sq.ft.	3,401.25
		Sq.m.	366.11
152	Snowceming of approved make and shade in two coats well scrubbed into the surface including finishing smooth at any height in any floor.	100 Sq.ft.	2,273.13
		Sq.m.	244.68
153	Extra for making band (patta) of required size in white wash, colour wash, distemper and painting at any height in any floor.	100 Sq.ft.	1,403.13
		Sq.m.	151.03
	S) PAINTING		
154	Painting with wood preservative paint (solignum or equivalent) of any approved proprietary brand two coats complete at any height in any floor .	100 Sq.ft.	3,383.75
		Sq.m.	364.22
155	Painting with coal tar two coats complete at any height in any floor.	100 Sq.ft.	1,460.58
		Sq.m.	157.21
156	Painting wood work with super glass enamel paint of approved make and shade two coats over and including the cost of one coat of priming complete at any height in any floor .	100 Sq.ft.	5,624.86
		Sq.m.	605.45
157	Painting plastered surface with super glass synthetic enamel paint of approved make and shade two coats over and including the cost of one coat of priming complete at any height in any floor	100 Sq.ft.	5,686.75
		Sq.m.	612.12
158	Painting iron work with enamel paint of approved make and shade two coats over and including the cost of one coat of priming complete at any height in any floor.	100 Sq.ft.	5,819.10
		Sq.m.	626.36
159	Painting iron work with synthetic enamel paint of approved make and shade two coats over and including the cost of one priming coat complete at any height in any floor .	100 Sq.ft.	6,071.25
		Sq.m.	653.50
160	Painting wood work with synthetic enamel paint of approved make and shade two coats over and including the cost of one priming coat complete at any height in any floor .	100 Sq.ft.	5,954.86
		Sq.m.	640.97

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S. No.	Description	Unit	Rate in Rs.
161	Painting with Robbialac supper gloss synthetic enamel paint of approved make and shade two coats over and including the cost of one priming coat complete over plastered surface at any height in any floor .	100 Sq.ft. Sq.m.	6,714.86 722.78
162	Painting with (ICI) Dulux plastic emulsion paint VIP of approved shade two coats over and including the cost of wall putti / priming coat complete over plastered surface at any height in any floor .	100 Sq.ft. Sq.m.	6,737.38 725.20
163	Painting with latex flat evershine paint or its equivalent on plastered surface in approved shade two coats over and including the cost of one priming coat complete at any height in any floor .	100 Sq.ft. Sq.m.	6,473.63 696.81
164	Painting with Robbialac aluminium paint of approved shade two coats over and including the cost of one priming coat complete on steel work at any height in any floor .	100 Sq.ft. Sq.m.	5,784.38 622.62
165	Painting with bituminous aluminium paint of approved shade two coats over and including the cost of one priming coat complete on steel work at any height in any floor.	100 Sq.ft. Sq.m.	5,528.13 595.04
166	Painting with Barico paint two coats over and including the cost of one priming coat complete on steel work at any height in any floor.	100 Sq.ft. Sq.m.	5,528.13 595.04
167	Painting with anticorrosive composition black bitumastic paint of approved make two coats complete on steel work at any height in any floor	100 Sq.ft. Sq.m.	3,380.00 363.82
168	Painting with black Japan paint two coats of approved manufacture complete on steel work at any height in any floor .	100 Sq.ft. Sq.m.	3,080.63 331.60
169	Painting with surfix boiler composition on exterior surface of boiler two coats including cleaning the surface before painting complete at any height in any floor.	100 Sq.ft. Sq.m.	5,945.13 639.93
170	Painting with surfix boiler composition on interior surface of boiler as directed by the Engineer-in-Charge two coats including cleaning the surface before painting complete at any height in any floor .	100 Sq.ft. Sq.m.	6,802.50 732.21
171	Painting with (Dulux Emulsion paint) of approved shade two coats over and including the cost of wall putti / priming coat complete at any height in any floor.	100 Sq.ft. Sq.m.	6,553.63 705.43
172	Painting three coats with weather shield paint deluxe (ICI) make of approved shade on plaster surface (External) and including the cost of cleaning the surface, sand papering etc. complete at any height in any floor.	100 Sft. Sq.m.	4,408.75 474.55

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S. No.	Description	Unit	Rate in Rs.
173	Painting on plastered surface with enamel paint of approved make and shade by spray machine two coats over and including the cost of one priming coat complete at any height in any floor .	100 Sq.ft.	10,598.28
		Sq.m.	1,140.79
174	Painting on iron work with Synthetic enamel paint of approved make and shade by spray machine two coats over and including the cost of one priming coat complete at any height in any floor .	100 Sq.ft.	8,046.88
		Sq.m.	866.16
175	Painting on wood work with Synthetic enamel paint of approved make and shade by spray machine two coats over and including the cost of one priming coat complete at any height in any floor .	100 Sq.ft.	6,852.95
		Sq.m.	737.64
176	Painting with Robbialac Super Gloss Synthetic enamel paint by spray machine of approved shade two coats over and including the cost of one priming coat complete over plastered surface at any height in any floor.	100 Sq.ft.	7,827.95
		Sq.m.	842.59
177	Painting with Robbialac V.I.P. Plastic Emulsion paint by spray machine of approved shade two coats over and including the cost of wall putty / priming coat complete over plastered surface at any height in any floor .	100 Sq.ft.	8,301.38
		Sq.m.	893.55
178	Painting with Latex Flat Evershine paint or its equivalent on plastered surface by spray machine of approved shade two coats over and including the cost of one priming coat complete at any height in any floor.	100 Sq.ft.	7,167.81
		Sq.m.	771.54
179	Painting with Aluminium paint by spray machine in approved make and shade over and including the cost of one priming coat complete on steel work at any height in any floor.	100 Sq.ft.	8,066.41
		Sq.m.	868.26
180	Painting with Bituminous Aluminium paint by spray machine in approved make and shade over and including the cost of one priming coat complete on steel work at any height in any floor .	100 Sq.ft.	7,746.09
		Sq.m.	833.78
181	Painting with Barico paint of an approved shade by spray machine two coats over and including the cost of one priming coat complete on steel work at any height in any floor .	100 Sq.ft.	7,746.09
		Sq.m.	833.78
182	Painting with anticorrosive composition black bituminous paint of approved make by spray machine two coats complete on steel work at any height in any floor.	100 Sq.ft.	3,247.50
		Sq.m.	349.56
183	Painting with Black Japan paint of approved manufacture by spray machine two coats complete on steel work at any height in any floor.	100 Sq.ft.	2,912.34
		Sq.m.	313.48
184	Painting with Surfix boiler composition on exterior surface of boiler by spray machine two coats including cleaning the surface before painting complete at any height in any floor .	100 Sq.ft.	5,663.91
		Sq.m.	609.66
185	Painting with Surfix boiler composition on interior surface of boiler by spray machine two coats including cleaning the surface before painting complete at any height in any floor .	100 Sq.ft.	5,811.41
		Sq.m.	625.53

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S. No.	Description	Unit	Rate in Rs.
186	Painting with two coats of acid resisting paint of approved shade and make over and including the cost of one priming coat, finished smooth including cleaning, rubbing and preparing the surface etc., complete on plastered surface at any height in any floor .	100 Sq.ft.	4,006.25
		Sq.m.	431.23
187	Painting with camouflaging paint of approved make and shade two coats over and including the cost of one coat of priming complete at any height in any floor.	100 Sq.ft.	5,435.50
		Sq.m.	585.07
188	Applying French or spirit polishing, one coat of approved make on wood work at any height in any floor.	100 Sq.ft.	5,133.35
		Sq.m.	552.55
189	Applying French or spirit polishing, two coat of approved make on wood work at any height in any floor .	100 Sq.ft.	6,342.72
		Sq.m.	682.72
189a	Lacquer polishing including sealer (ICI) on wood work at any height in any floor .	100 Sq.ft.	19,760.85
		Sq.m.	2,127.04
190	Applying Copal Varnish on wood work two coats complete at any height in any floor.	100 Sq.ft.	3,027.50
		Sq.m.	325.88
191	Applying Synthetic Clear Varnish of an approved manufacture on wood work two coats complete at any height in any floor .	100 Sq.ft.	2,773.75
		Sq.m.	298.56
192	Applying Bee Wax polisher of approved make on wood work two coats complete at any height in any floor .	100 Sq.ft.	4,574.38
		Sq.m.	492.38
193	Applying two coats of enamel paint of approved quality and shade over a coat of red oxide on 1/2" (15 mm) dia pipes including special complete in all floors.	100 Rft.	1,412.38
		Ru.m.	46.34
194	Applying two coats of enamel paint of approved quality and shade over a coat of red oxide on 3/4" (20 mm) dia pipes including specials complete in all floors .	100 Rft.	1,734.56
		Ru.m.	56.91
195	Applying two coats of enamel paint of approved quality and shade over a coat of red oxide on 1" (25 mm) dia pipes including specials complete in all floors ...	100 Rft.	2,247.81
		Ru.m.	73.75
196	Applying two coats of enamel paint of approved quality and shade over a coat of red oxide on 1-1/4" (32 mm) dia pipes including special complete in all floors	100 Rft.	2,858.50
		Ru.m.	93.78

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S. No.	Description	Unit	Rate in Rs.
197	Applying two coats of enamel paint of approved quality and shade over a coat of red oxide on 1-1/2" (40 mm) dia pipes including specials complete in all floors .	100 Rft. 100 Ru.m.	3,210.63 105.34
198	Applying two coats of enamel paint of approved quality and shade over a coat of red oxide on 1-3/4" (45 mm) dia pipes including special complete in all floors.	100 Rft. Ru.m.	3,596.50 118.00
199	Applying two coats of enamel paint of approved quality and shade over a coat of red oxide on 2" (50 mm) dia pipes including special complete in all floors ..	100 Rft. Ru.m.	3,980.50 130.59
200	Applying two coats of enamel paint of approved quality and shade over a coat of red oxide on 2-1/4" (57 mm) dia pipes including specials complete in all floors .	100 Rft. Ru.m.	4,433.81 145.47
201	Applying two coats of enamel paint of approved quality and shads over a coat of red oxide on 2-1/2" (65 mm) dia pipes including specials complete in all floor	100 Rft. Ru.m.	5,008.88 164.33
202	Applying two coats of enamel paint of approved quality and shade over a coat of red oxide on 3" (80 mm) dia pipes including specials complete in all floors..	100 Rft. Ru.m.	5,906.13 193.77
203	Applying two coats of enamel paint of approved quality and shade over a coat of red oxide on 3-1/2" (90 mm) dia pipes including specials complete in all floors .	100 Rft. Ru.m.	6,739.69 221.12
204	Applying two coats of enamel paint of approved quality and shade over a coat of red oxide on 4" (100 mm) dia pipes including specials complete in all floors	100 Rft. Ru.m.	7,577.00 248.59
205	Applying two coats of enamel paint of approved quality and shade over a coat of red oxide on 5" (130 mm) dia pipes including specials complete in all floors.	100 Rft. Ru.m.	9,246.00 303.35
206	Applying two coats of enamel paint of approved quality and shade over a coat of red oxide on 6" (150 mm) dia pipes including specials complete in all floors.	100 Rft. Ru.m.	13,323.13 437.11
207	Applying two coats of red oxide paint of approved quality complete on iron work at any height in any floor..	100 Sq.ft. Sq.m.	2,371.25 255.24
208	Applying three coats of red oxide paint of approved quality complete on iron work at any height in any floor.	100 Sq.ft. Sq.m.	2,651.88 285.45
209	Varnishing the pebble desh surface with 2 coats of synthetic varnish as approved and directed by the Engineer-in-Charge in all floors .	100 Sq.ft. Sq.m.	2,514.38 270.64

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S. No.	Description	Unit	Rate in Rs.
210	Lettering and figuring upto 2-1/2" (64 mm) size of any language on any surface with black Japan of approved quality etc., complete at any height in any floor .	Each Each	31.23 31.23
211	Lettering and figuring above 2-1/2" upto 6" (64 mm upto 152 mm) size of any language on any surface with black Japan of approved quality etc., complete at any height in any floor..	Each Each	49.96 49.96
212	Lettering and figuring above 6" upto 12" (152 mm upto 305 mm) size o.f any language on any surface with black Japan of approved quality etc., complete at any height in any floor .	Each Each	60.93 60.93
213	Lettering and figuring above 12" upto 18" (305 mm upto 457 mm) size of any language on any surface with black Japan of approved quality etc., complete at any height in any floor .	Each Each	92.96 92.96
214	Lettering and figuring above 18" upto 24" (457 mm upto 610 mm) size of any language on any surface with black Japan of approved quality etc., complete at any height in any floor.	Each Each	119.01 119.01

DISMANTLING AND DEMOLISHING

Code 123

DISMANTING AND DEMOLITION (SH- 123)

Brief Specification

A) During demolition, the contractor shall see that no damage or injury is done to the part of the work which are to be retained.

B) Boards, battens, frames and wood work, sheets, tiles, slates, trusses and all such materials likely to damage if dropped from a height, shall be carried to the ground or lowered with ropes.

C) If sewers or drains are to be removed or disturbed the contractor shall also remove all foul matter. The rate for removing pipes does not include excavation or the demolition of any masonry or brick work, which work shall be paid separately.

D) Doors and windows shall be removed from the chowkats with their hinges before dismantling the latter and shall be carefully carried and stacked where ordered by the Engineer-In-Charge.

E) All material dismantled shall be the properly of Government.

F) The work of removing dismantled material upto 300 feet, sorting and stacking the same, will be done within the rate.

G) The rate for dismantling roofs or floors will be include the dismantling of the roofing or flooring material as well as all planks, ceiling, rafters, purloins eaves, gutters, rain water pipes etc.

PAKISTAN PUBLIC WORKS DEPARTMENT

DISMANTLING AND DEMOLISHING

SUB-HEAD CODE 123

S. No.	Description	Unit	Rate in Rs.
	STONE WORK		
1	Dismantling dry stone masonry in foundation, plinth and ground floor including stacking salvaged material as directed within three chains (91.5 m).	100 Cft. Cu.m.	1,206.25 425.98
2	Dismantling stone masonry in mud mortar in foundation, plinth and ground floor including stacking salvaged material (serviceable) and disposing surplus stuff as directed within three chains (91.5 m) .	100 Cft. Cu.m.	1,809.38 638.98
3	Dismantling stone masonry in lime or cement mortar in foundation, plinth and ground floor including stacking salvaged material (serviceable) and disposing surplus stuff as directed within three chains (91.5 m)	100 Cft. Cu.m.	4,787.50 1,690.69
4	Dismantling dry stone pitching and stacking salvaged material (serviceable) and disposing surplus stuff as directed in foundation, plinth and ground floor.	100 Cft. Cu.m.	909.38 321.14
5	Dismantling stone pitching cement or lime grouted including stacking salvaged material (serviceable) and disposing surplus material as directed in foundation, plinth and ground floor.	100 Cft. Cu.m.	4,490.63 1,585.85
	BRICK WORK		
6	Dismantling sundried brick masonry in foundation, basement, plinth and ground floor including disposing of surplus material as directed within three chains (91.5 m).	100 Cft. Cu.m.	900.00 317.83
7	Dismantling dry 'burnt brick masonry in foundation, basement, plinth and ground floor including stacking salvaged material (serviceable) and disposing of surplus material as directed within three chains (91.5 m).	100 Cft. Cu.m.	890.63 314.52
8	Dismantling burnt brick masonry in mud mortar in foundation, basement, plinth and ground floor including stacking salvaged material (serviceable) and disposing of surplus material as directed within three chains (91.5 m).	100 Cft. Cu.m.	2,690.63 950.19

DISMANTLING AND DEMOLISHING

SUB-HEAD CODE 123

S. No.	Description	Unit	Rate in Rs.
9	Dismantling burnt brick masonry in lime or cement mortar foundation, basement, plinth and ground floor including stacking salvaged material (serviceable) and disposing of surplus material as directed within three chains (91.5 m)..	100 Cft.	3,006.25
		Cu.m.	1,061.65
10	Dismantling hollow burnt brick masonry in lime or cement mortar in foundation, basement, plinth and ground floor including stacking salvaged material (serviceable) and disposing of surplus material as directed within three chains (91.5 m) .	100 Cft.	3,303.13
		Cu.m.	1,166.49
	CEMENT CONCRETE BLOCK WORK		
11	Dismantling cement concrete block masonry work in lime or cement mortar in foundation, basement, plinth and ground floor including stacking salvaged material (serviceable) and disposing of surplus material as directed with in three chains (91.5 m).	100 Cft.	3,006.25
		Cu.m.	1,061.65
12	Dismantling hollow cement concrete block masonry in lime or cement mortar in foundation, basement, plinth and ground floor including stacking salvaged material (serviceable) and disposing..of surplus material as directed within three chains (91.5 m) .	100 Cft.	3,303.13
		Cu.m.	1,166.49
	CONCRETE		
13	Dismantling lime or cement concrete in foundation or under floor basement, plinth and ground floor and disposing of surplus material as directed within three chains (91.5 m)..	100 Cft.	3,600.00
		Cu.m.	1,271.33
14	Dismantling D.P.C. of cement concrete and disposing of the material as directed within three chains (91.5 m)..	100 Cft.	3,006.25
		Cu.m.	1,061.65
15	Dismantling R.C.C. including separating reinforcement from concrete in foundation, basement, plinth and ground floor including stacking at site and disposing of unserviceable material within three chains (91.5 m)	100 Cft.	8,456.25
		Cu.m.	2,986.30
16	Dismantling C.C. work cast in situ in foundation, basemont, plinth and ground floor including disposing of the material as directed within three chains (91.5 m).	100 Cft.	6,587.50
		Cu.m.	2,326.36
17	Extra for first floor above ground floor on item Nos. 3,8 to 13 and 16.	100 Cft.	755.00
		Cu.m.	266.63

DISMANTLING AND DEMOLISHING

SUB-HEAD CODE 123

S. No.	Description	Unit	Rate in Rs.
18	Extra for every additional floor above first floor on item Nos. 3,8 to 13 and 16	100 Cft.	681.25
		Cu.m.	240.58
19	Extra for first floor above ground floor on item No. 15.	100 Cft.	968.28
		Cu.m.	341.95
20	Extra for every additional floor above first floor on item No. 15.	100 Cft.	838.44
		Cu.m.	296.09
	ROOFING OTHER THAN R.C.C.		
21	Dismantling lime terracing upto 3" (76 mm) average thickness over roof in ground floor and disposing of the material as directed within three chains (91.5 m) .	100 Sq.ft.	1,137.50
		Sq.m.	122.44
22	Dismantling A.C. corrugated sheet roofing in ground floor including stacking salvaged material (serviceable) and disposing of unserviceable material as directed within three chains (91.5 m).	100 Sq.ft.	1,036.25
		Sq.m.	111.54
23	Dismantling G.I. corrugated sheet roofing in ground floor including stacking of salvaged material (serviceable) and disposing of unserviceable material as directed within three chains (91.5 m)	100 Sq.ft.	737.50
		Sq.m.	79.38
24	Dismantling tiled roofing including wooden batten in ground floor including stacking salvaged material (serviceable) and disposing of unserviceable material as directed within three chains (91.5 m) .	100 Sq.ft.	2,987.50
		Sq.m.	321.57
25	Dismantling jack arch roofing or floor in ground floor excluding the cost of removing the Joints including stacking salvaged material (serviceable) and disposing of surplus material as directed within three chains (91.5 m) .	100 Sq.ft.	3,600.00
		Sq.m.	387.50
26	Dismantling terracing of mud phuska 3" (76 mm) average thickness covered with bricks or tiles in ground floor including stacking salvaged material (serviceable) and disposing of unserviceable material as directed within three chains (91.5 m).	100 Sq.ft.	3,600.00
		Sq.m.	387.50
27	Dismantling manglore tile roofing without battens in ground floor including stacking salvaged material (serviceable) and disposing of unserviceable material as directed within three chains (91.5 m)	100 Sq.ft.	2,393.75
		Sq.m.	257.66

DISMANTLING AND DEMOLISHING

SUB-HEAD CODE 123

S. No.	Description	Unit	Rate in Rs.
28	Dismantling A.C sheet celotax, hard board or its equivalent ceiling with wooden beading in ground floor including stacking salvaged material (serviceable) and disposing of unserviceable material as directed within three chains (91.5 m).	100 Sq.ft.	1,036.25
		Sq.m.	111.54
29	Dismantling hessian or its equivalent ceiling with wooden beading in ground floor including stacking the salvaged material (serviceable) and disposing of unserviceable stuff as directed within three chains (91.5 m)	100 Sq.ft.	475.00
		Sq.m.	51.13
30	Dismantling R. S. beam in ground floor and stacking as directed within three chains (91.5 m).	Cwt.	1,135.00
		Kg.	22.34
31	Dismantling wooden battens, beams and planks from ground floor roof and stacking serviceable material and disposing of unserviceable stuff as directed within three chains (91.5 m) .	Cft.	58.25
		Cu.m.	2,057.08
32	Dismantling planked ceiling and its supporting timber in ground floor including stacking salvaged material (serviceable) and disposing of unserviceable stuff as directed within three chains (91.5 m) .	100 Sq.ft.	1,359.38
		Sq.m.	146.32
33	Extra for each additional floor above ground floor on item Nos. 21,24 and 26.	100 Sq.ft.	412.50
		Sq.m.	44.40
34	Extra for every additional floor above ground,ftoor on item Nos. 22,23 and 27.	100 Sq.ft.	180.00
		Sq.m.	19.38
35	Extra for each additional floor above ground floor on item No.25.	100 Sq.ft.	360.00
		Sq.m.	38.75
36	Extra for each additional floor above ground floor on.ftem Nos. 28, 29 and 32.	100 Sq.ft.	127.50
		Sq.m.	13.72
37	Extra for each additional floor above ground floor on item No. 30.	Cwt.	104.38
		Kg.	2.05
38	Extra for each additional floor above ground floor on item No. 31.	Cft.	4.69
		Cu.m.	165.76
	FLOORING		
39	Dismantling C.C. floor upto 2" (51 mm) thick in basement, plinth and ground floor including disposing off the material as directed within three chains (91.5 m).	100 Sq.ft.	1,503.13
		Sq.m.	161.79

DISMANTLING AND DEMOLISHING

SUB-HEAD CODE 123

S. No.	Description	Unit	Rate in Rs.
40	Dismantling cement tiled floor, dado or skirting in basement, plinth and ground floor including base mortar and stacking salvaged material (serviceable) and disposing of surplus stuff as directed within three chains (91.5 m)....	100 Sq.ft. Sq.m.	2,605.63 280.47
41	Dismantling stone soling upto 9" (229 mm) depth including stacking salvaged material as directed within three chains (91.5 m) .	100 Cft. Cum.	2,412.50 851.97
42	Dismantling brick or brick tiles flooring upto 4-1/2" (114 mm) thick without concrete bed including stacking salvaged material (serviceable) and disposing of surplus stuff as directed within three chains (91.5 m) .	100 Sq.ft. Sq.m.	1,206.25 129.84
43	Dismantling stone or pre-cast concrete slab floors of any thickness in any mortar including stacking salvaged material (serviceable) and disposing of surplus stuff as directed within three chains (91.5 m).	100 Sq.ft. Sq.m.	5,993.75 645.16
44	Extra for each additional floor above ground floor	100 Sq.ft. Sq.m.	292.50 31.48
	WOOD WORK		
45	Taking out door and window frames with or without hold fasts in ground floor including cutting walls, stacking salvaged material (serviceable) and disposing of unservice-able material as directed within three chains (91.5 m).	Each	584.38 584.38
46	Taking out clerestory window frame with or without hold fasts in ground floor including cutting walls, stacking salvaged material (serviceable) and disposing of unservice-able material as directed within three chains (91.5 m) .	Each	489.38 489.38
47	Taking out carefully shutters of doors and windows in ground floor and stacking as directed within three chains (91.5 m).	Each	346.88 346.88
48	Taking out carefully shutters of clerestory window in ground floor and stacking as directed within three chains (91.5m) .	Each	525.00 525.00
49	Taking out wooden planking from ground floor and stacking the material as directed within three chains (91.5 m) .	100 Sq.ft. Sq.m.	1,019.38 109.72
50	Dismantling wooden partition or jafre work in ground floor and stacking as directed within three chains (91.5 m) .	100 Sq.ft. Sq.m.	1,227.50 132.13

DISMANTLING AND DEMOLISHING

SUB-HEAD CODE 123

S. No.	Description	Unit	Rate in Rs.
51	Taking down picture rail and stacking the material as directed within three chains (91.5 m).	100 Rft.	461.88
		Ru.m.	15.15
52	Dismantling wooden trusses including rafters, battens and purlins wooden wall plate etc. in ground floor and stacking serviceable material and disposing of unservice-able stuff as directed within three chains (91.5 m) .	Cft	67.06
		Cu.m.	2,368.29
53	Extra for each additional floor above ground floor on item Nos. 45 and 46.	Each	40.63
			40.63
54	Extra for each additional floor above ground floor on item Nos. 47 and 48.	Each	28.75
			28.75
55	Extra for each additional floor above ground floor on item Nos. 49 and 50.	100 Sq.ft.	121.88
		Sq.m.	13.12
56	Extra for each additional floor above ground floor on item Nos. 52.	Cft	8.27
		Cu.m.	292.01
	IRON WORK		
57	Dismantling iron work in trusses in ground floor and stacking as directed within three chains (91.5 m) ..	Cwt.	1,723.75
		Kg	33.93
58	Dismantling rolled steel sections in frames and trusses in ground floor and stacking as directed within three chains (91.5 m)	Cwt.	2,426.88
		Kg	47.77
59	Extra for each additional floor above ground floor	Cwt.	249.38
		Kg	4.91
	MISCELLANEOUS		
60	Dismantling mud phuska wall including disposing of material as directed within three chains (91.5 m) ..	100 Cft.	603.13
		Cu.m.	212.99
61	Dismantling asbestos cement sheet, soft board, hard board, masonite laminated plastic board or its equivalent partition walls with wooden beading in ground floor including stacking salvaged material (serviceable) and disposing of unserviceable material as directed	100 Sq.ft.	687.50
		Sq.m.	74.00
62	Extra for each additional floor on item 61.	100 Sq.ft.	145.63
		Sq.m.	15.67
63	Dismantling all types of wire fencing or netting including winding the wires in rolls and rolling the netting and stacking serviceable material and disposing of unservice-able material as directed within three chains (91.5 m)..	Cwt.	3,262.50
		kg	64.22

DISMANTLING AND DEMOLISHING

SUB-HEAD CODE 123

S. No.	Description	Unit	Rate in Rs.
64	Dismantling rain water pipe including clamps and specials and stacking serviceable material, disposal of unserviceable material as directed within three chains (91.5 m).	100 Rft. Ru.m.	1,459.38 47.88

MISCELLANEOUS

Code 124

MISCELLANEOUS (S.H-124)

Brief Specification

(A) Fire Places, Chimneys etc ;-

i) The chimneys shall be of masonry or pipes etc. where masonry is to be provided; flu of chimneys shall be plastered as the work proceeds.

ii) An adequate key is given to the plaster and made is smooth with rounded corners,

iii) All flues shall be carefully and thoroughly cleaned and tested on completion,

iv) All chimneys shall be carried out to a minimum height of 3 feet above flat roofs and to the level of ridge in pent roofs,

v) Fire brick lining, gratings, damper doors and caps shall be provided as specified in t nomenclature of the schedules of quantity.

(B) Expansion Joints ;-

i) Joints should extend through foundation walls.

ii) Reinforcement must never pass through an expansion joint.

iii) Wall and roof joints must be made continuous over parapets.

iv) Expansion joints should always be made as simple as possible without sacrificing effectiveness.

v) Wind and water tightness are essential, so some form of seal is necessary.

vi) Usually a copper / aluminum strip is used for this purpose, vii)]/2 inch / 13 mm diameter holes at 8 inches / 200 mm centers should be punched near the edge of the strip to securely anchor it in the concrete.

vii) Expansion joints between the slabs should be to the full depth of the concrete. The expansion joints shall be 1 3 mm.

FALSE CEILING

1. **Thermopere Tiles:-**

Shall be procured from one of the renowned proprietary firms approved by Engineer in Charge. The rate is for use of 600 mm x 600 mm x 20 mm tiles. For use of any other size, where ordered and incorporated, appropriate adjustment shall be done in the rate.

2. **Dampa and Fiber Glass Ceiling:-**

Shall be of high grade and best imported quality. All fittings/fixtures and system of hanging shall be followed strictly in accordance with manufacturers instructions.

3. **Palster of Paris Ceiling:-**

Plaster of Paris tiles 600mm x 600mm x 20 mm of any pattern shall be procured from proprietary firms as approved by Engineer in Charge. The sheets shall be drilled and fixed with counter sunk screws and making good with Plaster of Paris.

METHOD OF MEASUREMENT

4. **Measurements:**

All work shall be measured net as fixed with no allowance for cutting and waste, laps, seams, turning etc.

CLARIFICATION OF RATES

5. **The rates, inter alia, include particularly:.**

a. Fixing complete as specified in any position.
b. All cutting and waste.
c. Cutting holes for pipes, etc.
d. Wooden frames, where provided shall be paid separately.

PAKISTAN PUBLIC WORKS DEPARTMENT

MISCELLANEOUS

SUB-HEAD CODE 124

S. No.	Description	Unit	Rate in Rs.
1	Providing and fixing 4" coaltarring (102 mm) dia (average) balli fencing posts embedded in concrete and coaltamng embedded portion but excluding the cost of excavation and concrete, complete.	Rft. Ru.m.	50.77 166.58
2	Providing and fixing 5" coaltarring (127 mm) dia (average) balli fencing posts embedded in concrete and coaltamng embedded portion but excluding the cost of excavation and concrete, complete.	Rft. Ru.m.	139.07 456.26
3	Providing and fixing angle iron fencing posts embedded in concrete and painting exposed portion with aluminium paint 3 coats including necessary holes but excluding the cost of excavation and concrete, complete .	Cwt. kg.	15,427.55 303.69
4	Cutting holes upto 36 square inches (232 Sqm) in R.C.C. or R.B. walls, floors and roofs upto 9" (229 mm) thick making good the holes with cement concrete 1 ;2:4 including finishing, curing etc. and disposal of rubbish from site complete, in any floor.	Each	138.28 138.28
5	Cutting holes in walls of all kinds other than R.C.C. or R.B. walls, upto 9" (229 mm) thick etc. making goods the same in cement concrete 1:2:4 including finishing, curing etc. and disposal of rubbish from site complete, in any floor holes upto 36 square inches (232 Sqm.).	Each	86.80 86.80
6	Cutting holes in walls of all kinds other than R.C.C. or R.B. upto 9" (229 mm) thick etc. making good the same in cement concrete 1:2:4 including finishing, curing etc. and disposal of rubbish from site complete, in any floor holes above 36 square inches (232 Sqm.) upto 144 square inches (928 Sqm.).	Each	125.51 125.51
7	Cutting holes in walls of all kinds other than R.C.C. or R.B. upto 9" (229 mm) thick etc. making good the same in cement concrete 1:2:4 including finishing, curing etc. and disposal of rubbish from site complete, in any floor holes above 144 square inches (928 Sqm.) upto 6 Sq.ft. (0.56 Sqm.).	Each	192.34 192.34
8	Extra in cutting holes are required upto 18" (457 mm) thick in item Nos. 5,6 and 7: holes upto 36 square inches (232 Sqm) .	Each	57.46 57.46

MISCELLANEOUS

SUB-HEAD CODE 124

S. No.	Description	Unit	Rate in Rs.
9	Extra if cutting holes are required upto 18" (457 mm) thick in item Nos. 5,6 and 7: holes above 36 square inches (232 Sqm) upto 144 square inches (928 Sqm)..	Each	81.50
			81.50
10	Extra if cutting holes is required upto 18" (457 mm)thick in item Nos. 5,6 and 7: holes above 144 square inches upto 6 Sq.ft. (928 Sqm upto 0.56 Sqm.) .	Each	479.69
			479.69
11	Providing and fixing cast iron grating in chuilah etc. complete	Lbs.	140.14
		kg.	308.95
12	Providing and fixing mild steel bars grating in chuilah etc. complete.	Lbs.	248.78
		kg.	548.47
13	Providing and fixing clamps of M. S. bars of required dia for fans as per design at the time of casting in reinforced cement concrete slab or	Lbs.	202.39
		kg.	446.20
14	Providing and fixing clamps of M. S. flats of required design and section for fans etc. with or without bolts and nuts in beams, rafters etc.	Lbs.	355.94
		kg.	784.72
15	Providing and fixing wind ties of flat iron with bolts nuts and plates of required sizes fixed into the walls including cutting slotted holes in the wind ties etc. complete excluding the cost of concrete work.	Lbs.	377.40
		kg.	832.03
16	Providing and fixing galvanized iron barbed wire fencing (with two points) to the posts of any description complete with hooks and binding wire etc. if required (cost of posts not included).	Cwt.	21,396.17
		kg.	421.18
17	Providing and fixing galvanized iron barbed wire fencing (with four points) to the posts of any description complete with hooks and binding wire etc- if required (cost of posts not included).	Cwt.	17,111.17
		kg.	336.83
18	Providing and fixing flag staff of galvanized iron pipes 2" (50 mm) dia with pully, winder string and other accessories of standard sizes but excluding the cost of base of cement concrete.	Rft.	659.73
		Ru.m.	2,164.47
19	Providing and fixing flag staff of galvanized iron pipes 2-1/2" (65 mm) dia with pully, winder string and other accessories of standard sizes but excluding the cost of base of cement concrete.	Rft.	783.17
		Ru.m.	2,569.44
20	Providing and fixing flag staff of galvanized iron pipes 3" (80 mm) dia with pully, winder string and other accessories of standard sizes but excluding the cost of base of cement concrete.	Rft.	947.75
		Ru.m.	3,109.43
21	Providing and fixing national flags made of cloth of approved silken quality .	Sq.ft.	205.83

MISCELLANEOUS
SUB-HEAD CODE 124

S. No.	Description	Unit	Rate in Rs.
		Sq.m.	2,215.57
22	Providing and fixing national flags made of cloth of approved cotton quality.	Sq.ft. Sq.m.	147.29 1,585.43
23	Providing and fixing national flags made of doth of approved woolen quality .	Sq.ft. Sq.m.	545.83 5,875.30
24	Supplying galvanized iron fire buckets of 4 imperial gallons (18.17 litres) capacity including painting 2 coats on all surfaces and lettering with approved paint the word fire, 3 to 6" (76 mm upto 152 mm) size .	Each	706.58 706.58
25	Supplying and fixing angle iron, channel or R. S. joists, bucket stand of approved design fixed in cement concrete 1:2:4 including fixing 2" (51 mm) dia. Chain and iron hooks of approved design for holding fire buckets etc. complete with painting 2 coats and locking arrangements (excluding the cost of cement concrete and earth work) .	Cwt. kg.	20,297.62 399.56
26	Providing gunny bags full of sand, mouth stitched, 1.25 Cft. (0.035 cm) capacity including stacking as per direction complete.	Each	209.38 209.38
27	Providing and fixing in wall fire extinguisher of approved quality 2 gallons (9.09 litres) capacity complete with brackets including cutting holes in walls, fixing wooden gutties and making good the same with cement concrete 1:2:4 etc., complete.	Each	15,896.88 15,896.88
28	Providing and fixing iron hooks of M. S. bars as per design in wall of all kinds including cutting holes in walls and making good the same in cement concrete 1:2:4 curing etc. complete.	Lbs. kg.	112.52 248.06
29	Providing recess in cement concrete floor of any description for cycle stand as per design and drawing with hooks and chain as locking arrangements complete (excluding the cost of cement concrete floor) ..	Each	428.75 428.75
30	Providing sal wood cycle stand as per design and drawing with hooks and chain as looking and arrangements complete including painting 2 coats with approved paint.	Cft. Cu.m.	16,188.83 571,703.76
31	Providing mild steel bar cycle stand fixed in cement concrete floor as per design and drawing with hooks and chain as locking arrangements including painting 2 coats with approved paint complete (excluding the cost of cement concrete floor).	Cwt. kg.	21,662.82 426.41

MISCELLANEOUS

SUB-HEAD CODE 124

S. No.	Description	Unit	Rate in Rs.
32	Providing reinforced cement concrete precast cycle stand as per design and drawing with hooks and chain as locking arrangements etc. complete.	Each	2,011.68
			2,011.68
33	Providing and fixing reinforced cement concrete precast slab 1-1/2' (38 mm) thick finished with marble mosaic 3/8" (9.5 mm) thick of approved shade and colour including laying in cement mortar 1:3 over steps/stairs including curing polishing complete in any floor .	Sq.ft.	173.66
		Sq.m.	1,869.26
34	Providing and fixing reinforced cement precast slab 2" (51 mm) thick finished with marble mosaic 1/2" (13 mm) thick of approved shade and colour including laying in cement mortar 1:3 over steps/stair including curing, polishing complete in any floor.	Sq.ft.	214.41
		Sq.m.	2,307.94
35	Providing and fixing C.I. pipe spouts of 2" (51 mm) dia and required length including fixing in cement mortar 1:4 etc. complete.	Rft.	465.63
		Ru.m.	1,527.64
36	Providing and fixing C.I- pipe spouts of 3" (80 mm) dia and required length including fixing in cement mortar 1:4 etc. complete..	Rft.	515.63
		Ru.m.	1,691.68
37	Providing and fixing C.I. pipe spouts of 4" (100 mm) dia and required length including fixing in cement mortar 1:4 etc. complete .	Rft.	718.13
		Ru.m.	2,356.05
38	Providing and fixing asbestos pipe spouts of 2" (50 mm) dia and required length including fixing in cement mortar 1:4 etc. complete .	Rft.	375.63
		Ru.m.	1,232.37
39	Providing and fixing asbestos pipe spouts of 3" (80 mm) dia and required length including fixing in cement mortar 1:4 etc. complete .	Rft.	465.63
		Ru.m.	1,527.64
40	Providing and fixing asbestos pipe spouts of 4" (100 mm) dia and required length including fixing in cement mortar 1:4 etc. complete	Rft.	511.88
		Ru.m.	1,679.38
41	Providing and fixing PVC pipe spouts of 2" (50 mm) dia and required length including fixing in cement mortar 1:4 etc- complete .	Rft.	296.88
		Ru.m.	974.00
42	Providing and fixing PVC pipe spouts of 3" (80 mm) dia and required length including fixing in cement mortar 1:4 etc. complete	Rft.	478.13
		Ru.m.	1,568.65

MISCELLANEOUS
SUB-HEAD CODE 124

S. No.	Description	Unit	Rate in Rs.
43	Providing and fixing PVC pipe spouts of 4" (100 mm) dia and required length including fixing in cement mortar 1:4 etc. complete	Rft. Ru.m.	1,816.75 5,960.47
44	Providing and fixing 3" (80 mm) dia cast iron rain-water down pipe with bolts and nuts fixed in cement concrete 1:2:4 including filling joints with spun-yarn and cement mortar 1:2 etc. complete .	Rft. Ru.m.	538.44 1,766.53
45	Providing and fixing 4" (100 mm) dia cast iron rainwater down pipe with bolts and nuts fixed in cement concrete 1:2:4 including filling joints with spun-yarn and cement mortar 1:2 etc. complete .	Rft. Ru.m.	740.94 2,430.90
46	Providing and fixing 3" (80 mm) dia cast iron head of approved shape for rain-water down pipe with bolts and nuts fixed in cement concrete 1:2:4 including filling joints wrth spun-yarn and cement mortar 1:2 etc. complete .	Each	1,973.75 1,973.75
47	Providing and fixing 4" (100 mm) dia cast iron head of approved shape for rain-water down pipe with bolts and nuts fixed in cement concrete 1:2:4 including filling Joints with spun-yarn and cement mortar 1:2 etc. complete	Each	2,166.88 2,166.88
48	Providing and fixing 3" (80 mm) dia cast iron shoe of approved shape for rain-water down pipe with bolts and nuts fixed in cement concrete 1:2:4 including filling joints with spun-yarn and cement mortar 1:2 etc. complete .	Each	1,541.88 1,541.88
49	Providing and fixing 4" (100 mm) dia cast iron shoe of approved shape for rain-water down pipe with bolts and nuts fixed in cement concrete 1:2:4 including filling joints with spun-yarn and cement mortar 1:2 etc. complete	Each	1,704.38 1,704.38
50	Providing and fixing 3" (80 mm) dia cast iron bend of any degree for rain-water down pipe with bolts and nuts fixed in cement concrete 1:2:4 including filling joints with spun-yarn and cement mortar 1:2 etc. complete .	Each	2,104.38 2,104.38
51	Providing and fixing 4" (100 mm) dia cast iron bend of any degree for rain-water down pipe with bolts and nuts fixed in cement concrete 1:2:4 including filling joints with spun-yarn and cement mortar 1:2 etc. complete .	Each	2,629.38 2,629.38
52	Providing and fixing 3" (80 mm) dia cast iron offsets for rain-water down pipe with bolts and nuts fixed in cement concrete 1:2:4 including filling joints with spun-yarn and cement mortar 1:2 etc. complete .	Each	1,666.88 1,666.88

MISCELLANEOUS

SUB-HEAD CODE 124

S. No.	Description	Unit	Rate in Rs.
53	Providing and fixing 4" (100 mm) dia cast iron offsets for rain-water down pipe with bolts and nuts fixed in cement concrete 1:2:4 including filling Joints with spun-yarn and cement mortar 1:2 etc. complete .	Each	2,416.88 2,416.88
54	Providing and fixing 3" (80 mm) dia asbestos cement rain-water down pipe with sealing collors, bolts and nuts and tail piece fixed in cement concrete 1:2:4 including filling joints with asbestos rope, asbestumen and cement mortar 1:2 etc.complete.	Rft. Ru.m.	462.92 1,518.76
55	Providing and fixing 4" (100 mm) dia asbestos cement SLP rain-water down pipe with sealing collors, bolts and nuts and tail piece fixed in cement concrete 1:2:4 including filling joints with asbestos rope, asbestumen and cement mortar 1:2 etc. complete.	Rft. Ru.m.	509.17 1,670.49
56	Providing and fixing 3" (80 mm) dia shoe of asbestos cement rain-water down pipe with mild steel fasteners fixed in cement concrete 1:2:4 including filling joints with asbestos rope, asbestumen and	Each	857.50 857.50
57	Providing and fixing 4" (100 mm) dia shoe of asbestos cement rain-water down pipe with mild steel fasteners fixed in cement concrete 1:2:4 including filling pints with asbestos rope, asbestumen and cement mortar 1:2 etc. complete.	Each	932.50 932.50
58	Providing and fixing 3" (80 mm) dia asbestos cement plain bend of any degree for rain-water down pipe with mild steel fasteners fixed in cement concrete 1:2:4 including filling joints with asbestos rope, asbestumen and cement mortar 1:2 etc. complete	Each	870.00 870.00
59	Providing and fixing 4" (100 mm) dia asbestos cement plain bend of any degree for rain-water down pipe with mild steel fasteners fixed in cement concrete 1:2:4 including filling joints with asbestos rope, asbestumen and cement mortar 1:2 etc. complete	Each	1,407.50 1,407.50
60	Providing and fixing 3" (80 mm) dia with 6" (150 mm) projection asbestos cement offset for rain-water down pipe with mild steel fasteners fixed in cement concrete 1:2:4 including filling joints with asbestos rope, asbestumen and cement mortar 1:2 etc. complete.	Each	809.38 809.38
61	Providing and fixing 4" (100 mm) dia with 6" (150 mm) projection asbestos cement offset for rain-water down pipe with mild steel fasteners fixed in cement concrete 1:2:4 including filling joints with asbestos rope, asbestumen and cement mortar 1:2 etc. complete	Each	880.63 880.63

MISCELLANEOUS

SUB-HEAD CODE 124

S. No.	Description	Unit	Rate in Rs.
62	Providing and fixing 3" (80 mm) dia asbestos cement head of any shape for rain-water down pipe with mild steel fasteners fixed in cement concrete 1:2:4 including filling joints with asbestos rope, asbestumen and cement mortar 1:2 etc. complete.	Each	863.75
			863.75
63	Providing and fixing 4" (100 mm) dia asbestos cement head of any shape for rain-water down pipe with mild steel fasteners fixed in cement concrete 1:2:4 including filling joints with asbestos rope, asbestumen and cement mortar 1:2 etc. complete.	Each	1,063.75
			1,063.75
64	Providing and fixing 3" (80 mm) dia polyvinyle chloride rain water (PVC) down pipe with mild steel clamps, bolts and nuts fixed in cement concrete 1:2:4 etc. complete .	Rft.	495.48
		Ru.m.	1,625.59
65	Providing and fixing 4" (100 mm) dia polyvinyle chloride rain water (PVC) down pipe with mild steel clamps, bolts and nuts fixed in cement concrete 1;2:4 etc. complete ...	Rft.	718.67
		Ru.m.	2,357.84
66	Providing and fixing 3" (80 mm) dia polyvinyle chloride (PVC) sockets for rain water down pipe .	Each	368.75
			368.75
67	Providing and fixing 4" (100 mm) dia polyvinyle chloride (PVC) sockets for rain water down pipe	Each	446.25
			446.25
68	Providing and fixing 3" (80 mm) dia polyvinyle chloride (PVC) bend of any degree for rain water down pipe with clamps, bolts and nuts in cement concrete 1:2:4 etc. complete..	Each	1,590.63
			1,590.63
69	Providing and fixing 4" (100 mm) dia polyvinyle chloride (PVC) bend of any degree for rain water down pipe with clamps, bolts and nuts in cement concrete 1:2:4 etc. complete..	Each	1,748.13
			1,748.13

MISCELLANEOUS

SUB-HEAD CODE 124

S. No.	Description	Unit	Rate in Rs.
70	Providing and fixing 3" (80 mm) dia polyvinyle chloride (PVC) offset of any degree for rain water down pipe with clamps, bolts and nuts in cement concrete 1:2:4 etc. complete.	Each	1,816.88 1,816.88
71	Providing and fixing 4" (100 mm) dia polyvinyle chloride (PVC) offset of any degree for rain water down pipe with clamps, bolts and nuts in cement concrete 1:2:4 etc. complete.	Each	2,110.63 2,110.63
72	Providing fire wood chullah in 1:9 cement concrete block masonry laid in lime cement mortar 1:1:6 with 1/2" (13 mm) cement plaster 1:6 colour washing etc. complete internal size 12" x 9" x 9" (305 mm x 229 mm x 229 mm) in any floor .	Each	1,066.97 1,066.97
73	Providing fire wood chullah in 2nd class brick masonry laid in cement mortar 1:6 with 3/4" (19 mm) cement plaster 1:6 and colour washing etc. complete internal size 12" x 9" x'9" (305 mm x 229 mm x 229 mm) in any floor.	Each	1,169.04 1,169.04
74	Providing chullah for charcoal in 1:9 cement concrete block masonry laid in lime cement mortar 1:1:6 with 1/2" (13 mm) cement plaster 1:6 with iron grating and colour washing etc. complete internal size 12" x 9' x 9" (305 mm x 229 mm x 229 mm) in any floor.	Each	1,344.54 1,344.54
75	Providing chullah for charcoal in second class brick masonry laid in 1;6 cement mortar with 3/4" (19 mm) cement plaster 1:6 with iron grating and colour washing etc. complete internal size 12" x 9" x 9" (305 mm x 229 mm x 229 mm) in any floor .	Set	1,289.04 1,289.04
76	Providing charcoal double set standing chullah with 3" thick reinforced cement concrete slab 4 ft x 2 ft (1219 mm x 610 mm) size over 1:9 cement concrete block masonry walls 6" (152 mm) thick and 2 ft. (610 mm) high laid in cement mortar 1:6,with 1/2" (13 mm) thick cement plaster 1:6 with iron grating and colourwashing etc. complete, chullah size 12" x 9" x 9" (305 mm x 229 mm x 229 mm) internal in any floor.	Set	8,296.00 8,296.00
77	Providing charcoal double set standing chullah with 3" (76 mm) thick reinforced cement concrete slab 4 ft. x 2 ft. (1219 mm x 610 mm) size over first class brick masonry walls 9" (229 mm) thick and 2 ft. (610 mm) high laid in cement mortar 1:6 with 3/4" (19 mm) thick cement plaster 1:6 with iron grating and colour washing etc. complete, chullah size 12" x 9" x 9" (305 mm x 229 mm x 229 mm) internal in any floor.	Set	10,300.44 10,300.44

MISCELLANEOUS

SUB-HEAD CODE 124

S. No.	Description	Unit	Rate in Rs.
78	Providing and fixing 1/8" (3.2 mm) thick mild steel sheet damper door of approved size to the throat of fire place with working arrangements including cutting and chasing and making good the same as per instructions of the Ehgineer-in-Charge in any floor.	Sq.ft.	1,474.47
		Sq.m.	15,871.01
79	Cleaning chimney flues of any section and height	Rft.	118.75
		Ru.m.	389.60
80	Providing and fixing reinforced cement concrete pipe 4" (100 mm) dia in chimney flue set in 1:3 cement mortar including the cost of R.C.C. collars, M. S. clamps and making recesses complete.	Rft.	287.19
		Ru.m.	942.22
81	Providing and fixing reinforced cement concrete pipe 6" (150 mm) dia in chimney flue set in 1:3 cement mortar including the cost of collars, M. S. clamps and making recesses etc. complete.	Rft.	393.44
		Ru.m.	1,290.81
82	Providing and fixing reinforced cement concrete pipe 9" (229 mm) dia in chimney flue set in 1:3 cement mortar including the cost of collars, M. S. clamps and making recesses etc. complete.	Rft.	562.19
		Ru.m.	1,844.45
83	Providing and fixing 3/16" (4.8 mm) thick M. S. caps of approved size and shape on top of chimney of R.C.C. pipe including painting 2 coats on a coat of priming complete suitable for 4" (100 mm) pipe flue..	Each	1,240.63
			1,240.63
84	Providing and fixing 3/16" (4.8 mm) thick M. S. caps of approved size and shape on top of chimney of R.C.C. pipe including painting 2 coats on a coat of priming complete suitable for 6" (150 mm) pipe flue..	Each	1,765.63
			1,765.63
85	Providing and fixing 3/16" (4.8 mm) thick M. S. caps of approved size and shape on top of chimney of R.C. pipe including painting 2 coats on a coat of priming complete suitable for 9" (229 mm) pipe flue.	Each	2,615.63
			2,615.63
86	Pargetting the chimney flue with cement sand and cowdung mortar 1:3:1 (1 cement, 3 sand and 1 cowdung) in approved manner and as per direction of the Engineer-in-Charge upto 10 feet (3 m) height from ground level	100 Sq.ft.	6,700.69
		Sq.m.	721.26
87	Pargetting the chimney flue with lime surkhi 1:3 (1 lime and 3 surkhi) in approved manner and as per direction of the Engineer-in-Charge upto 10 feet (3 m) height from ground level.	100 Sq.ft.	2,346.88
		Sq.m.	252.62
88	Pargetting the chimney flue with lime cowdung mortar-1:3 (1 lime and 3 cowdung) in approved manner and as per direction of the Engineer-in-Charge upto 10 feet (3 m) height from ground level	100 Sq.ft.	5,761.69

MISCELLANEOUS
SUB-HEAD CODE 124

S. No.	Description	Unit	Rate in Rs.
		Sq.m.	620.18
89	Pargetting the chimney flue with lime sand and cowdung mortar 1:2.1 (1 lime, 2 sand and 1 cowdung) in approved manner and as per direction of the Engineer-in-Charge upto 10 feet (3 m) height from ground level .	100 Sq.ft. Sq.m.	5,403.39 581.62
90	Pargetting the chimney flue with non-hydraulic lime and sand 1:3:10 (1 cement, 3 lime and 10 sand) in approved manner and as per direction of the Engineer-in-Charge upto 10 feet (3 m) height from ground level	100 Sq.ft. Sq.m.	6,283.11 676.31
91	Extra for every additional 10 feet (3 m) height or part there of in item No. 86 to 90.	100 Sq.ft. Sq.m.	612.50 65.93
92	Providing and fixing plain polyvinyle chloride (PVC) water stops 18" (457 mm) wide in vertical or horizontal expansion joints including cutting and jointing etc. complete in all floors .	Rft. Ru.m.	874.06 2,867.66
93	Providing and fixing plain polyvinyle chloride (PVC) water stops 12" (305 mm) wide in vertical or horizontal expansion joints including cutting and jointing etc. complete in all floors .	Rft. Ru.m.	592.81 1,944.92
94	Providing and fixing plain polyvinyle chloride (PVC) water stops 8" (203 mm) wide in vertical or horizontal expansion joints including cutting and jointing etc. complete in all floors .	Rft. Ru.m.	405.31 1,329.77
95	Providing and fixing plain polyvinyle chloride (PVC) water stops 6" (152 mm) wide in vertical or horizontal expansion Joints including cutting and jointing etc. complete in all floors.	Rft. Ru.m.	150.31 493.15
96	Providing and fixing PVC eyeletted water stops 14-1/2" (368 mm) wide in vertical or horizontal expansion joints including cutting or jointing etc. complete in all floors	Rft. Ru.m.	717.81 2,355.03
97	Providing and fixing PVC ribbed water stops 9" (229 mm) wide in vertical or horizontal expansion joints including cutting or jointing etc., complete in all floors.	Rft. Ru.m.	448.81 1,472.48
98	Providing and fixing PVC ribbed water stops 6" (152 mm) wide in vertical or horizontal expansion joints including cutting or jointing etc., complete in all floors.	Rft. Ru.m.	300.31 985.28
99	Providing and fixing PVC ribbed water stops 4-1/2" (114 mm) wide in vertical or horizontal expansion joints including cutting or jointing etc., complete.	Rft. Ru.m.	246.31 808.11

MISCELLANEOUS
SUB-HEAD CODE 124

S. No.	Description	Unit	Rate in Rs.
100	Providing and fixing 16 SWG galvanized iron sheet covering of approved shape and design to expansion joints of roof slab with wooden gutties and screws etc. complete .	Sq.ft.	550.13
		Sq.m.	5,921.49
101	Providing and filling asphalt bitumen mixed with sand @ 90 Lbs. per Cft. (1443 Kg/Cum.) of sand in expansion joints of roof slab etc.	Cft.	3,002.59
		Cu.m.	106,035.74
102	Providing and fixing 16 oz.(4.89 Kg/ Sqm.) aluminium sheet covering of approved shape and design to expansion Joints of roof slabs (with slotted holes) with wooden gutties and screws etc. complete..	Sq.ft.	750.75
		Sq.m.	8,081.00
103	Providing and fixing 16 oz. (4.89 Kg/ Sqm.) aluminium sheet covering to expansion joints in walls and columns as per approved design including providing clamps and fixing with screws and rawal plugs or wooden gutties including making slotted holes etc. complete.	Sq.ft.	888.13
		Sq.m.	9,559.69
104	Providing and fixing 16 oz. (4.89 Kg/ Sqm.) crimped copper sheet covering strips in vertical joints including punching slotted holes and fixing with wooden gutties or rawl plugs and screws etc., complete .	Sq.ft.	820.00
		Sq.m.	8,826.40
105	Cutting M. S. bars, bolts, rivets, steel sections etc. of any shape and size at any height .	Sq.inch	10.47
		Sq.mm	0.02
106	Providing and fixing brass grill railing of approved pattern and design including fixing with brass screws and polishing etc. complete .	Cwt.	151,031.17
		kg.	2,977.47
107	Providing and laying mild steel grating with or without perforated over drain as per direction of the Engineer-in-Charge complete	Cwt.	13,393.05
		kg.	263.64
108	Providing and fixing aluminium angle 1" x 1" x 1/8" (25 mm x 25 mm x 3.2 mm) in corners with rawl plugs and aluminium screws etc. complete.	Rft.	223.90
		Ru.m.	734.58

MISCELLANEOUS
SUB-HEAD CODE 124

S. No.	Description	Unit	Rate in Rs.
109	Providing and fixing aluminium angle 1-1/2"x 1-1/2"x 1/8" (38 mm x 38 mm x 3.2 mm) in corners with rawl plugs and aluminium screws etc-complete .	Rft. Ru.m.	273.90 898.62
110	Providing and fixing aluminium strips 1" wide 1 /8" thick (25 mm wide 3.2 mm thick) with aluminium screws etc. complete.	Rft. Ru.m.	107.90 354.02
111	Providing and fixing aluminium strip lining 1-1/2" (38 mm) wide 1/8" (3.2 mm) thick with aluminium screws etc. complete	Rft. Ru.m.	122.82 402.95
112	Providing and laying foam concrete slab 3" (76 mm) thick (40 Lbs/Cft or 641 Kg/Cqm. density) in 1:2 cement mortar in all floors including curing etc. complete including filling of joints as per item 101.	Sq.ft. Sq.m.	185.75 1,999.45
113	Providing and laying foam concrete slab 4" (102 mm) thick (40 Lbs/Cft or 641 Kg/Cqm. density) in 1:2 cement mortar in all floors including curing etc. complete including filling of joints as per item 1 01.	Sq.ft. Sq.m.	246.15 2,649.57
114	Providing and fixing cork board 1" (25 mm) thick lining of deodar wood frame including cost of screws and nails etc. complete but excluding the cost of wood work in all floors.	Sq.ft. Sq.m.	412.15 4,436.37
115	Providing and fixing cork board 2" (51 mm) thick lining of deodar wood frame including cost of screws and nails etc. complete but excluding the cost of wood work in all floors .	Sq.ft. Sq.m.	572.57 6,163.08
116	Providing and fixing 6" (150 mm) dia wind catcher of G.I. sheet 22 gauge (1.2 mm thick) of approved shape and design including the cost of wire gauze covering and bottom ring etc. complete in any floor.	Rft. Ru.m.	4,219.20 13,842.52
117	Extra for every additional 1 " (25 mm) dia over item No. 116	Rft. Ru.m.	584.83 1,918.72
118	Providing and fixing 6" (150 mm) dia cast iron pipe wind catcher of approved shape and design including the cost of wire gauze covering and bottom ring etc. complete in any floor.	Cwt. kg.	12,007.50 236.29
119	Supplying 3" (76 mm) dia (average) bamboo ladder 3 feet (610 mm) wide centre to centre (average) with 2-1/2" (64 mm) dia rungs at 18" (457 mm) centre to centre including fixing necessary bolts and nuts and washers etc. complete .	Rft. Ru.m.	677.97 2,224.31

MISCELLANEOUS
SUB-HEAD CODE 124

S. No.	Description	Unit	Rate in Rs.
120	Supplying 4" (102 mm) dia (average) bamboo iadder2 feet (610 mm) wide centre to centre (average) with 2-1/2" (64 mm) dia rungs at 18" (457 mm) centre to centre including fixing necessary bolts and nuts and washers etc. complete.	Rft. Ru.m.	796.72 2,613.91
121	Supplying 3" to 4" (76 mm to 102 mm) dia (average) sal-balli ladder 2 feet (610 mm) wide centre to centre (average) with 2-1/2" (64 mm) dia rungs at 18" (457 mm) centre to centre including fixing necessary bolts and nuts and washers etc. complete.	Rft. Ru.m.	699.84 2,296.08
122	Supplying and fixing ladder of flat iron 3" x 1 /4" (76 mm x 6.4 mm) in section and step bars of 5/8" (16 mm) dia at 18" (457 mm) centre to centre including fixing flat iron stays as per approved design and direction of the engineer-in-charge complete .	Cwt. kg.	13,912.56 273.78
123	Supplying and fixing ladder of flat iron 2-1/2" x 1/4" (64 mm x 6.4 mm) in section and step bars of 5/8" (16 mm) dia at 18" (457 mm) centre to centre including fixing flat iron stays as per approved design and direction of the Engineer-in-Charge complete .	Cwt. kg.	15,263.52 300.36
124	Supplying and fixing ladder of flat iron 2" x 3/16" (51 mm x 4.8 mm) in section and step bars of 5/8" (16 mm) dia at 18" (457 mm) centre to centre including fixing flat iron stays as per approved design and direction of the Engineer-in-Charge .	Cwt. kg.	16,669.92 328.04
125	Supplying and fixing ladder of flat iron 1-1/2" x 3/16" (38 mm x 4.8 mm) in section and step bars of 5/8" (16 mm) dia at 18" (457 mm) centre to centre including fixing flat iron stays as per approved design and direction of the Engineer-in-Charge .	Cwt. kg.	17,654.41 347.41
126	Drilling holes upto 1" (25 mm) dia as per direction of the Engineer-in-Charge: in plates 1/2" (13 mm) thick .	Each	51.88 51.88
127	Drilling holes upto 1" (25 mm) dia as per direction of the Engineer-in-Charge: in plates 3/8" (9.5 mm) thick..	Each	64.38 64.38
128	Drilling holes upto 1" (25 mm) dia as per direction of the Engineer-in-Charge: in plates 1/4" (6-5 mm) thick.	Each	20.63 20.63
129	Drilling holes upto 1" (25 mm) dia as per direction of the Engineer-in-Charge: in plates 1/8" (3.2 mm) thick ..	Each	14.38 14.38
130	Providing and fixing aluminium sheet of 22 gauge (1.15 mm thick) on wooden surface with sunken aluminium screw of required size as per direction of the Engineer-in-Charge.	Sq.ft.	260.74

MISCELLANEOUS
SUB-HEAD CODE 124

S. No.	Description	Unit	Rate in Rs.
		Sq.m.	2,806.55
131	Providing and fixing galvanized iron sheet of 22 gauge (1.15 mm thick) on wooden surface with sunken galvanized iron screws of required size as per direction of the Engineer-in-Charge .	Sq.ft.	230.93
		Sq.m.	2,485.65
132	Making bolts and nuts of M.S. rods (labour rate)	Cwt.	3,121.44
		kg.	61.45
133	Supplying 1-1/2" (38 mm) dia bamboo jhandies 10 feet (3 m) long with rough cotton cloth of fast colour 15" x 15" (381 mm x 381 mm) with iron shoe and painting the bamboos as per direction of the Engineer-in-Charge	Each	781.79
			781.79
134	Supplying 10" to 15" (254 mm to 381 mm) long wooden pegs for alignments etc. as directed .	100 Nos.	12,518.75
			12,518.75
135	Supplying 6" to 9" (152 mm to 229 mm) long wooden pegs for surveying work etc. as directed.	100 Nos.	9,393.75
			9,393.75
136	Providing and installing hand pump with 1-1/2" (40 mm) dia G.I. pipe, 50' long brass strainer 2" (50 mm) dia with iron shoe 6' including the cost of 4" (100 mm) dia G.I. casing 4ft. (1219 mm) high above ground level embedded in cement concrete 1:2:4 with iron handles, cap of required size and shape with all accessories and fitting etc. complete: brass strainer 2" (50 mm) dia with iron shoe including boring, fitting and fixing..	Job	67,219.50
			67,219.50
137	Add/deduct the length of G.I pipe 1-1/2" (40 mm) dia for hand pump.	Rft.	590.43
		Ru.m.	1,937.09
138	Providing and installing cast iron spiral stair case with central post, hand rail and braces at required interval:; etc. complete but excluding the cost of cement concrete work in base and foundation 4 ft. (1.22 m) dia .	Cwt.	16,081.25
		kg.	316.56
139	Providing and installing M.S spiral stair case with central post, hand rail and braces at required intervals etc. complete but excluding the cost of cement work in base and foundation 6 ft. (1.82 m) dia .	Cwt.	15,831.25
		kg.	311.64
140	Providing and laying gola 3" x 3" (76 mm x 76 mm) size wrth lime surkhi concrete 1:2:4 (1 lime, 2 surkhi and 4 brick ballast) with 1" (25 mm) and down gauge brick ballast at the junction of roof slab and walls and finished with lime surkhi plaster 1:2 including curing etc., complete .	100 Rft.	2,284.88
		Ru.m.	74.96

MISCELLANEOUS
SUB-HEAD CODE 124

S. No.	Description	Unit	Rate in Rs.
141	Providing and laying gola 3" x 3" (76 mm x 76 mm) concrete 1:2:4 using graded screened bajri at junction of roof slab and walls and finished with cement plaster 1:4 including curing etc. complete.	100 Rft.	3,202.36
		Ru.m.	105.06
142	Providing and making khassi purnala 9" to 12" (229 mm to 305 mm) wide along the wall with cement mortar 1:4 .	100 Rft.	4,314.55
		Ru.m.	141.55
143	Providing and laying 1:2:4 cement concrete khuras 2" (51 mm) thick 2 ft. x 2 ft. (610 mm x 610 mm) size on roof including finishing with cement plaster 1:4, curing etc. complete.	Each	174.83
			174.83
144	Providing and making platform 4 ft. x 2 ft. x 4-1/2" (1.22 m x 0.61 m x 115 mm) of brick masonry laid in cement mortar 1:6 over 3" (76 mm) cement concrete 1:4:8 including curing and cost of excavation etc. complete .	Each	3,506.43
			3,506.43
145	Providing and making 1" (25 mm) thick deodar wood notice board with frame.	Sq.ft.	1,126.39
		Sq.m.	12,124.34
146	Providing and making notice board of G.I. sheet with wooden frame complete .	Sq.ft.	1,267.97
		Sq.m.	13,647.15
147	Providing cheses 2" to 3" (51 mm to 76 mm) deep in all type of walls (excluding stone walls) for laying pipes and filling the same with cement concrete 1:2;4 after laying the pipe and finishing the same with 1;4 cement mortar including curing etc. complete .	Sq.ft.	161.33
		Sq.m.	1,736.56
148	Sawing charges by machine for converting hard wood sleepers or logs into planks and battens of any size for doors, windows and trusses etc.	Cft.	125.00
		Cu.m.	4,414.34
149	Sawing charges by machine for converting soft wood sleepers or logs into planks and battens of any size for doors, windows and trusses etc.	Cft.	125.00
		Cu.m.	4,414.34

MISCELLANEOUS
SUB-HEAD CODE 124

S. No.	Description	Unit	Rate in Rs.
150	Providing and fixing holdfasts/iron clamps of M.S. round bars of required design and shape with or without welding including the cost of threading and nuts sunk in frames of doors, windows etc. in any floor complete	Lbs.	154.52
		kg.	340.65
151	Providing and fixing broken glass pieces over wall in cement mortar 1:4 including curing etc. complete at any height and in any floor.	Sq.ft.	95.61
		Sq.m.	1,029.15
152	Breaking bricks by hand including grading, screening and stacking etc. complete 2" (51 mm) and down gauge .	100 Cft.	2,671.88
		Cu.m.	943.56
153	Breaking bricks by hand including grading, screening and stacking etc. complete 1-1/2" (38 mm) and down gauge.	100 Cft.	2,968.75
		Cu.m.	1,048.41
154	Breaking bricks by hand including grading, screening and stacking etc. complete 1" (25 mm) and down gauge.	100 Cft.	3,562.50
		Cu.m.	1,258.09
155	Breaking bricks by hand including grading, screening and stacking etc., complete jhama complete 3/4" (19 mm) and down gauge .	100 Cft.	4,156.25
		Cu.m.	1,467.77
156	Breaking stones by hand, grading, screening and stacking etc. complete 3" (75 mm) and down gauge .	100 Cft.	3,250.00
		Cu.m.	1,147.73
157	Breaking stones by hand, grading, screening and stacking etc. complete 2-1/2" (64 mm) and down gauge .	100 Cft.	3,593.75
		Cu.m.	1,269.12
158	Breaking stones by hand, grading, screening and stacking etc. complete 2" (51 mm) and down gauge .	100 Cft.	3,937.50
		Cu.m.	1,390.52
159	Breaking stones by hand, grading, screening and stacking etc. complete 1-1/2" (38 mm) and down gauge.	100 Cft.	4,281.25
		Cu.m.	1,511.91
160	Breaking stones by hand, grading, screening and stacking etc. complete 1" (25 mm) and down gauge .	100 Cft.	4,625.00
		Cu.m.	1,633.30
161	Breaking stones by hand, grading, screening and stacking etc. complete 3/4" (19 mm) and down gauge .	100 Cft.	4,968.75
		Cu.m.	1,754.70
162	Dressing stone (dressed surface shall be measured): hammer dressed .	100 Sq.ft.	2,210.63
		Sq.m.	237.95

MISCELLANEOUS
SUB-HEAD CODE 124

S. No.	Description	Unit	Rate in Rs.
163	Dressing stone (dressed surface shall be measured): chisel dressed	100 Sq.ft.	3,525.00
		Sq.m.	379.43
164	Dressing stone (dressed surface shall be measured); fine dressed	100 Sq.ft.	6,151.88
		Sq.m.	662.18
165	Dressing stone (dressed surface shall be measured): rough tooled dressed	100 Sq.ft.	2,868.75
		Sq.m.	308.79
166	Providing and laying cement concrete 1:2:4 using 3/4" (19 mm) down gauge screened, graded bajri in patties (panel strips) of required size in floors and dado of any description of any colour and design in all floors including form-work, curing etc., complete .	Cft.	697.85
		Cu.m.	24,644.41
167	Providing and laying aluminium patties (panel strips) of any section in floor and dado of any description in all floors.	Lbs.	428.93
		kg.	945.64
168	Providing and laying 5 mm glass patties (panel strips) upto 1" (25 mm) depth in floor and dado of any description in all floors .	Rft.	28.31
		Ru.m.	92.89
169	Providing and laying 3 mm glass patties (panel strips) upto 1" (25 mm) depth in floor and dado of any description in all floors .	Rft.	22.06
		Ru.m.	72.38
170	Providing and laying 3/8" (9mm) thick marble patties (panel strips) up to 1" (25mm) depth in floor and dado of any description in all floor.	Rft.	17.38
		Ru.m.	57.00
171	Providing and laying 1/2" (13mm) thick marble patties (panel strips) up to 1-1/2" (38 mm) depth in floor and dado of any description in all floors.	Rft.	20.19
		Ru.m.	66.23
172	Providing and laying polyvinyle chloride (PVC) nosing to treads 30 mm wide with approved adhesive including the coat of brass screws, rawl plugs etc. complete in all floors .	Rft.	218.81
		Ru.m.	717.89
173	Providing and laying polyvinyle chloride (PVC) nosing to treads 40 mm wide with approved adhesive including the cost of brass screws, rawl plugs etc., complete in all floors .	Rft.	235.06
		Ru.m.	771.20
174	Providing and laying polyvinyle chloride (PVC) nosing to treads 45 mm wide with approved adhesive including the cost of brass screws, rawl plugs etc. complete in all floors .	Rft.	253.81
		Ru.m.	832.72
175	Providing and laying polyvinyle chloride (PVC) nosing to treads 50 mm wide with approved adhesive including the cost of brass screws, rawl plugs etc. complete in all floors .	Rft.	266.31

MISCELLANEOUS

SUB-HEAD CODE 124

S. No.	Description	Unit	Rate in Rs.
		Ru.m.	873.73
176	Providing and fixing aluminium (ribbed) nosing to treads of required sections with aluminium lugs fixed with aluminium screws and rawl plugs etc. as per instructions of the Engineer-in-Charge in all floors	Lbs. kg.	330.99 729.71
177	Providing and fixing flat iron (ribbed) nosing to treads of required sections with iron lugs fixed with screws and rawl plugs etc. as per instructions of the Engineer-in-Charge in all floors .	Cwt. kg.	15,377.63 302.71
178	Providing and fixing brass (ribbed) nosing to treads of required sections with iron lugs fixed with brass screws and rawl plugs etc. as per instructions of the Engineer-in-Charge in all floors .	Lbs. kg.	867.12 1,911.68
179	Supplying and fixing venation strip blinds horizontal/vertical of approved shade, quality and design including the cost of all accessories etc complete as per direction of the Engineer incharge.	Sft Sqm	485.47 5,225.54
180	P/F windows roll up blinds sunscreen, dark out, or translucent fabric any colour/shade best quality (imported) with manual roll up arrangements complete in all respect with all other required accessories and hardware from the approved suppliers and manufacturers, as per direction of Engineer incharge	P.Sft Sqm	314.58 3,386.14
181	Providing and laying Khaprail tiles C.C 1:2:4: in different design laid on sloppy slab & shades laid in cement mortar 1:2 in Joints at any height and floor. as per directions of the Engineer incharge.	Sft Sqm	154.06 1,658.31
181a	Providing and laying burnt clay Khaprail tiles in different designs laid on sloppy slab & shades laid in cement mortar 1:2 in Joints in any floor and height as per directions of the Engineer incharge.	Sft Sqm	238.75 2,569.88
182	Providing and fixing reflecting glass pan imported 5 mm thick with iron nails, screws, putty, rubber packing U type I/c the cost of beading as directed by the engineer incharge.	Sft Sqm	578.06 6,222.14
183	Providing and fixing dampa ceiling aluminium, Denmark / Germany make 2' x 2' tiles/ strip ceiling including all accessories i.e, plump, rod etc complete as required in any floor.	Sft Sqm	1,426.17 15,351.17
185	Providing and fixing dampa ceiling aluminium, China make 2' x 2' tiles/ strip ceiling including all accessories i.e, plump, rod etc complete as required in any floor.	Sft Sqm	415.55 4,472.91

MISCELLANEOUS

SUB-HEAD CODE 124

S. No.	Description	Unit	Rate in Rs.
186	Providing and fixing Gypsum board 2' x 2' x 12mm tiles ceiling including Aluminum T & L angle 1" x 1" i.c hanger clips jointing clips and G.I Wire etc complete as required in any floor.	Sft	172.73
		Sqm	1,859.30
187	Providing and fixing mineral fiber tiles 2' x 2' x 12mm ceiling including T & L angle hanger clips jointing clips and G.I Wire etc complete as required in any floor.	Sft	153.05
		Sqm	1,647.38
188	Providing and fixing Plaster of Paris 19mm thick false ceiling I/c Aluminum T and L angle 1" x 1" i.c hanger clips jointing clips and g.I. Wire etc complete as required in any floor.	Sft	120.23
		Sqm	1,294.19
189	Providing and fixing Plaster of Paris tiles size (2' x 2' x 3/4") for falls ceiling I/c Aluminum T and L angle 1" x 1" i.c hanger clips jointing clips and g.I. Wire etc complete as required in any floor.	Sft	244.92
		Sqm	2,636.31
190	Providing and fixing PVC board 2' x 2' tiles plain ceiling including Aluminum T & L angle 1" x 1" i.c hanger clips jointing clips and G.I Wire etc complete as required in any floor.	Sft	192.42
		Sqm	2,071.21
191	Providing and fixing PVC board 2' x 2' tiles printed ceiling including Aluminum T & L angle 1" x 1" i.c hanger clips jointing clips and G.I Wire etc complete as required in any floor.	Sft	231.80
		Sqm	2,495.04
192	P/F kitchen cabinet wall mounted of 3/4" thick laminated board with best quality deodar wood frame and beading 1/8" thick hard board backing required section in approved pattern etc, fixed on wall with rawal pugs, screws i/c cost of glue, nall, piano hinges, handles and painting or polishing etc as drawing complete all as respect.	Sft	1,363.25
		Sqm	14,673.90
193	P/F kitchen cabinet floor mounted of 3/4" thick laminated board with best quality deodar wood frame and beading required section in approved pattern etc, fixed on wall with rawal pugs, screws i/c cost of glue, nall, piano hinges, handles and painting or polishing etc as drawing complete all as respect.	Sft	1,178.19
		Sqm	12,681.97
194	Providing & Fixing Jumbolon insulation to hose pipes with any adhesive and after wraping tightly malmal cloth soaked in bitumen i.c the cost of cleaning the surface as per direction of the Engineer Incharge in any floor in any hight. 1/2" to 3/4" pipes (15 mm to 20 mm)	Rft.	96.76
		Ru.m.	317.39

MISCELLANEOUS
SUB-HEAD CODE 124

S. No.	Description	Unit	Rate in Rs.
195	Providing & Fixing Jumbolon insulation to hose pipes with any adhesive and after wraping tightly malmal cloth soaked in bitumen i.c the cost of cleaning the surface as per direction of the Engineer Incharge in any floor in any hight. 1" to 1-1/4" pipe (25 mm to 32 mm).	Rft. Ru.m.	103.94 340.94
196	Providing & Fixing Jumbolon insulation to hose pipes with any adhesive and after wraping tightly malmal cloth soaked in bitumen i.c the cost of cleaning the surface as per direction of the Engineer Incharge in any floor in any hight. 1-1/2" pipes (40 mm).	Rft. Ru.m.	137.29 450.31
197	Providing & Fixing of Diamond Jumbolon insulation board 1" thick and polyphone sheet over diamond jumblolon insulation board for roof insulation as per direction of the Engineer Incharge in any floor in any height.	Sft Sq.m	98.50 1,060.24
197	Providing & Fixing of Diamond Jumbolon insulation board 1.5" thick and polyphone sheet over diamond jumblolon insulation board for roof insulation as per direction of the Engineer Incharge in any floor in any height.	Sft Sq.m	136.47 1,468.94
198	Providing & Fixing of Diamond Jumbolon insulation board 2" thick and polyphone sheet over diamond jumblolon insulation board for roof insulation as per direction of the Engineer Incharge in any floor in any height.	Sft Sq.m	171.91 1,850.38
199	Providing and carrying out Termite proofing in foundations, under floos and wood work surface with a soloution using of confront TC with water and spraying the solution of the area to be treated as completed as per direction of Engineer incharge	Sft Sqm	13.13 141.28
200	Providing & laying of Aluminium foil 4mm thick Ezogrip of approved quality i/c the cost of cleaning, roof, cartage, wastage etc complete as per direction of Engineer incharge in any height in any floor.	Sft Sqm	148.13 1,594.40
201	Providing and fixing of Alucobond USA aluminum composite panels (Cladding) 4mm thick with 0.3/0.3mm skin thickness finished PVDF coat. Class B2 non FR. Framing will be aluminum tube 2"x1" with relevant fittings etc. complete the in all respect as directed by the Engineer in charge.	Sft Sqm	1,816.88 3,986.25

MISCELLANEOUS

SUB-HEAD CODE 124

S. No.	Description	Unit	Rate in Rs.
202	Providing and fixing 2" dia stainless steel pipe (18 gauge) railing alongwith 4 Nos 3/4" dia parallel pipe having S/S pipe vertical post 2" dia at 3 ft C/C average spacing and 4" dia vertical post at start turning and end point including cost of labour, welding charges fitting & fixing in marble floor and wall etc complete as per direction of the Engineer incharge.	Rft. Ru.m.	2,234.38 7,330.63
203	Providing and fixing G.I Razor wire 18 gauge 1'-6" dia at 6" center to center with double razor and 1/4 inch dia G.I wire bars at top and bottom etc complete as per direction of the Engineer incharge.	Cwt P.Kg	20,941.36 412.23
204	Providng and fixing fiber shed consisting of 5 ply fiber sheet and 2" x 2" M.S Box pipe 16 gauge main frame beams and central bracing 2" x 2" at 24" C/C diagonal and 2"x2" support upto 2 feet c/c over 4" dia M.S pipe 16 Gauge 10-14 feet heigh i/c the cost of excavation with PCC 1:2:4 and RCC with steel and M.S steel plate 1/2" thick in foundation, size 2'x2' cutting fitting, welding painting etc, complete as epr direction of engineer incharge.	Sft Sqm	1,075.00 11,571.19
205	Providing and fixing of aluminum conventional system curtain wall using aluminum profile 64mm x 128mm x 2.5mm thick in anodized / powder coated RAL (as per approved) color with double glazed tempered glass unit (5mm tinted + 12mm AGU +5mm clear local (Ghani/Tariq) include 100 Micronanu Shutter safety film (Rhino Solar Windows film made in Taiwan) with M.S Angle/ Bracket, Anchor Bolt, cross bolt with other SS fitting screw with PVC rubber & weather sealants & imported accessories, complete in all respect.	Sft Sqm	3,986.25 42,907.60
206	Providing and fixing cupboard frame 2-1/2" x 1-1/4" deodar wood and 3/4" thick lasani lamination sheet shutter with PVC gola and lacer polish frame alongwith hanging rod, handle or catcher complete in all respect as per direction of Engineer incharge.	Sft Sqm	819.45 8,820.44
207	Providing and fixing ward robe 24" deep consisting 19mm thick laminated sheet on bottom, top-sides partion, shelves & shutters etc and 4mm thick pressed on back side, 2-1/2" x 1-1/4" best quality deodar wood frame and all open edges filled 3/4" molding PVC gola complete i/c the cost of glue iron nails screws, heavy type piano hinges, 1/2" handle, catchers, locks etc, complete the as per direction of the Engineer Incharge.	Sft Sqm	1,289.74 13,882.60
208	Providing and fixing Gypsum board 12mm thick, fixed with GI hanging approved suspension system & joint taping etc complete in all respect as per specifications shown on the drawings (Elephant / DFB / Lodhia Gypsum industries (Pvt) Ltd or equivalent.	Sft Sqm	276.25 2,973.53

MISCELLANEOUS

SUB-HEAD CODE 124

S. No.	Description	Unit	Rate in Rs.
209	Providing and fixing kitchen wall cabinet making of shutter board box & 3/4 inch thick high gloss laminated lasani shutter, PVC beading, PVC sheet backing of approved design etc, fixed with rawal plugs, screws i/c cost of glue, nail, hinges, handles etc as per drawing, complete in all respect.	Sft	1,582.87
		Sqm	17,037.88
210	Providing and fixing kitchen floor cabinet making of shutter board box & 3/4 inch thick high gloss laminated Lasani shutter, PVC beading, deodar wooden frame 2.5" x 1.25" size making tray drawer of approved design etc, fixed with rawal plugs, screws including cost of glue, nail, hinges, handles etc as per drawing, complete in all respect.	Sft	1,552.45
		Sqm	16,710.38
211	Providing and laying liminated (HDF) floors of approved quality, size and colour, as shown in drawings i/c cost of border, complete in all respect (ROBINA/ SARINA/ Equivalent)	Sft	583.75
		Sqm	6,283.43

MAINTENANCE

Code 125

PAKISTAN PUBLIC WORKS DEPARTMENT

MAINTENANCE

SUB-HEAD CODE 125

S. No.	Description	Unit	Rate in Rs.
	A) REPAIRS TO CRACKS, SCRAPING OF PLASTERS, CLEANING, ETC.		
1	Repairs to cracks in lime terracing on roof by filling with one part red lead, 4 parts ground lime and 5 parts sand including cutting the chase of required size, finishing, quring including removal of rubbish etc. from site complete as directed by the Engineer-in-Charge, in ground floor.	100 Rft.	13,615.31
		Ru.m.	446.70
2	Repairs to cracks to reinforced cement concrete work by grouting with cement gun with cement mortar 1:2 including cutting the chase of required size, finishing, curing including removal of rubbish etc. from site complete as directed by the Engineer-in-Charge, in ground floor .	100 Rft.	5,695.94
		Ru.m.	186.87
3	Repairs to cracks by filling bitumen mixed with cement and sand 0.2 lbs. cement, 0.8 Cft. sand and 90 Lbs. bitumen (0.1 Kg. cement, 0-02 cu.m. sand, 41 Kg. bitumen) including cutting the chase of required size, and finishing top etc. complete as directed by the Engineer-in-Charge, in ground floor.	100 Rft.	13,542.00
		Ru.m.	444.29
4	Repairs to cracks in cement mortar 1:4 including cutting the chase upto 3/4" (19 mm) depth, finishing, curing including removal of rubbish etc. from site complete in ground floor .	100 Rft.	3,730.85
		Ru.m.	122.40
5	Repairs to cracks in cement mortar 1:4 including cutting the chase above 3/4" (19 mm) upto 1-1/2" (38 mm) in depth, finishing, curing including removal of rubbish etc. from site complete in ground floor.	100 Rft.	5,058.78
		Ru.m.	165.97
6	Replacing disintegrated or salt eaten bricks with first class burnt brick including dismantling and laying first class burnt bricks with cement mortar 1:4, pointing with cement mortar 1:2, curing and removing the rubbish, etc., from the site as directed by the Engineer-in-Charge in any floor.	Each	70.63
			70.63
7	Extra repair to cracks in basement, mezzanine and first floor in item 1 to 5	100 Rft.	380.00
		Ru.m.	12.47
8	Extra repair to cracks in every additional floor above first floor in item 1 to 5.	100 Rft.	285.00
		Ru.m.	9.35

MAINTENANCE
SUB-HEAD CODE 125

S. No.	Description	Unit	Rate in Rs.
9	Applying bar-soap and alum solution at 1/4 Lbs. (0.13 Kg) bar-soap 1/4 Lbs. (0.13 Kg) alum and 1 gallon (4.54 litre boiling water %Sft.) including washing with lime wash two coats on roofs as directed by the Engineer-in-Charge in ground floor.	100 Sq.ft	527.19
		Sq.m.	56.75
10	Extra for repair to roofs in every additional floor above first floor in item 9.	100 Sq.ft	50.00
		Sq.m.	5.38
11	Rubbing and polishing old mosaic floor, dado and skirting in any floors.	100 Sq.ft	952.50
		Sq.m.	102.53
12	Cleaning and washing floor with caustic soda solution in ground floor.	100 Sq.ft	289.25
		Sq.m.	31.13
13	Extra for cleaning and washing with caustic soda solution in basement, mezzanine and first floor in item No. 12.	100 Sq.ft	50.00
		Sq.m.	5.38
14	Extra for cleaning and washing with caustic soda solution in every additional floor above first floor In item No. 12.	100 Sq.ft	47.50
		Sq.m.	5.11
15	Scraping rust from old girders and rails etc. in all floors..	100 Sq.ft	1,318.75
		Sq.m.	141.95
16	Scraping, rubbing and cleaning white-wash, colour wash and oil-free distemper including removal of rubbish etc. as per direction of the Engineer-in-charge complete in all floors .	100 Sq.ft	456.25
		Sq.m.	49.11
17	Scraping, rubbing and cleaning oil bound distemper, plastic paint and snowcem including removal of rubbish etc. from the site as per direction of the Engineer-in-Charge in all floors.	100 Sq.ft	743.75
		Sq.m.	80.06
18	Brushing and cleaning with solution of caustic soda the surface of snow-crete, colour crete, sandtex, stone masonry, brick masonry including removal of rubbish etc. from the site as per direction of the Engineer-in-Charge in all floors .	100 Sq.ft	549.38
		Sq.m.	59.13
19	Removing stain from wood work by scraping or applying any approved chemical, including removal of rubbish etc. from the site as per direction of the Engineer-in-Charge in all floors.	100 Sq.ft	414.25
		Sq.m.	44.59
20	Scraping old paint of all sorts with blow lamp from wood work or plastered surface including rubbing and cleaning including removal of rubbish etc. from the site as per direction of the Engineer-in-Charge in all floors.	100 Sq.ft	618.75
		Sq.m.	66.60

MAINTENANCE
SUB-HEAD CODE 125

S. No.	Description	Unit	Rate in Rs.
21	Scraping old paint of all sorts with blow lamp from iron work including rubbing and cleaning including removal of rubbish etc. from the site as per direction of the Engineer-in-charge in all floors .	100 Sq.ft Sq.m.	363.75 39.15
22	Removing all sorts of varnish and polishes etc. without blow lamp from wooden surface including removal of rubbish etc- from site as directed, in all floors complete.	100 Sq.ft Sq.m.	433.13 46.62
23	Removing mud plaster of any thickness from walls and disposing of the rubbish etc. from site as directed .	100 Sq.ft Sq.m.	341.88 36.80
24	Removing cement or lime plaster of any thickness from walls and disposing of the rubbish etc. from site as directed	100 Sq.ft Sq.m.	843.75 90.82
25	Cutting G.I. sheets plain or corrugated as directed.	Rft. Ru.m.	18.13 59.47
26	Chase cutting in cement concrete or RCC work of all kind upto 2 Sq.in (13 Sqm) in cross section including removal of rubbish etc. from site complete .	Rft. Ru.m.	266.25 873.52
27	Chase cutting in cement concrete or RCC work of all kind upto 4 Sq.in (26 Sqm) in cross section including removal of rubbish etc. from site complete.	Rft. Ru.m.	397.50 1,304.13
	B) PATCH PLASTERING		
28	Plastering 1/2" (13 mm) thick in patches in cement and sand mortar 1:4 including curing and scraping old damaged portion in regular shape and removal of rubbish from the site etc. complete as per direction of Engineer-in-Charge in ground floor.	100 Sq.ft Sq.m.	5,291.84 569.61
29	Plastering 3/4" (19 mm) thick in patches in cement sand mortar 1:4 including curing and scraping old damaged portion in regular shape and removal of rubbish from the site etc. complete as per direction of Engineer-in-Charge in ground floor.	100 Sq.ft Sq.m.	5,818.41 626.29
30	Plastering 1" (25 mm) thick in patches in cement sand mortar 1:4 including curing and scraping old damaged portion in regular shape and removal of rubbish from the site etc. complete as per direction of Engineer-in-Charge in ground floor.	100 Sq.ft Sq.m.	7,395.67 796.06

MAINTENANCE
SUB-HEAD CODE 125

S. No.	Description	Unit	Rate in Rs.
31	Plastering 1-1/4" (32 mm) thick in patches in cement and sand mortar 1:4 including curing and scraping old damaged portion in regular shape and removal of rubbish from the site etc. complete as per direction of Engineer-in-Charge in ground floor.	100 Sq.ft	10,690.90
		Sq.m.	1,150.76
32	Plastering 1-1/2" (38 mm) thick in patches in cement and sand mortar 1:4 including curing and scraping old damaged portion in regular shape and removal of rubbish from the site etc. complete as per direction of Engineer-in-charge in around floor..	100 Sq.ft	11,895.12
		Sq.m.	1,280.38
33	Plastering 1/2" (13 mm) thick in patches in lime cement and sand mortar 1:1:3 including curing and scraping old damaged portion in regular shape and removal of rubbish from the site etc. complete as per direction of Engineer-in-charge in ground floor..	100 Sq.ft	6,133.84
		Sq.m.	660.24
34	Plastering 3/4" (19 mm) thick in patches in lime cement and mortar 1:1:3 including curing and scraping old damaged portion in regular shape and removal of rubbish from the site etc. complete as per direction of Engineer-in-Charge in ground floor...	100 Sq.ft	7,127.45
		Sq.m.	767.19
35	Plastering 1" (25 mm) thick in patches in lime cement and sand mortar 1:1:3 including curing and scraping old damaged portion in regular shape and removal of rubbish from the site etc. complete as per direction of Engineer-in-Charge in ground floor.	100 Sq.ft	9,815.68
		Sq.m.	1,056.55
36	Plastering 1-1/4" (32 mm) thick in patches in lime cement sand mortar 1:1:3 including curing and scraping old damaged portion in regular shape and removal of rubbish from the site etc. complete as per direction of Engineer-in-Charge in ground floor..	100 Sq.ft	13,999.82
		Sq.m.	1,506.93
37	Plastering 1-1/2" (38 mm) thick in patches in lime cement sand mortar 1:1:3 including curing and scraping old damaged portion in regular shape and removal of rubbish from the site etc. complete as per direction of the Engineer-in-Charge in ground floor..	100 Sq.ft	14,513.76
		Sq.m.	1,562.25
38	Plastering 1/2" (13 mm) thick in patches in lime surkhi mortar 1:2 including curing and scraping old damaged portion in regular shape and removal of rubbish from the site etc. complete as per direction of the Engineer-in-Charge in ground floor..	100 Sq.ft	6,160.86
		Sq.m.	663.15
39	Plastering 3/4" (19 mm) thick in patches in lime surkhi mortar 1:2 including curing and scraping old damaged portion in regular shape and removal of rubbish from the site etc. complete as per direction of Engineer-in-Charge in ground floor.	100 Sq.ft	7,747.37
		Sq.m.	833.92

MAINTENANCE

SUB-HEAD CODE 125

S. No.	Description	Unit	Rate in Rs.
40	Plastering 1" (25 mm) thick in patches in lime surkhi mortar 1:2 including curing and scraping old damaged portion in regular shape and removal of rubbish from the site etc. complete as per direction of Engineer-in-Charge in ground floor.	100 Sq.ft	9,869.67
		Sq.m.	1,062.36
41	Plastering 1-1/4" (32 mm) thick in patches in lime surkhi mortar 1:2 including curing and scraping old damaged portion in regular shape and removal of rubbish from the site etc. complete as per direction of Engineer-in-Charge in ground floor.	100 Sq.ft	14,050.20
		Sq.m.	1,512.35
42	Plastering 1-1/2" (38 mm) thick in patches in lime surkhi mortar 1:2 including curing and scraping old damaged portion in regular shape and removal of rubbish from the site etc. complete as per direction of Engineer-in-Charge in ground floor..	100 Sq.ft	14,575.98
		Sq.m.	1,568.94
43	Plastering 1/2" (13 mm) thick in patches in lime sand mortar 1:2 including curing and scraping old damaged portion in regular shape and removal of rubbish from the site etc. complete as per direction of Engineer-in- charge in ground floor.	100 Sq.ft	6,160.86
		Sq.m.	663.15
44	Plastering 3/4" (19 mm) thick in patches in lime sand mortar 1:2 including curing and scraping old damaged portion in regular shape and removal of rubbish from the site etc. complete as per direction of Engineer-in- charge in ground floor.	100 Sq.ft	7,747.37
		Sq.m.	833.92
45	Plastering 1" (25 mm) thick in patches in lime sand mortar 1:2 including curing and scraping old damaged portion in regular shape and removal of rubbish from the site etc. complete as per direction of Engineer-in-Charge in ground floor.	100 Sq.ft	9,869.67
		Sq.m.	1,062.36
46	Plastering 1-1/4" (32 mm) thick in patches in lime sand mortar 1:2 including curing and scraping old damaged portion in regular shape and removal of rubbish from the site etc. complete as per direction of Engineer-in-Charge in ground floor.	100 Sq.ft	13,493.33
		Sq.m.	1,452.41
47	Plastering 1-1/2" (38 mm) thick in patches in lime sand mortar 1:2 including curing and scraping old damaged portion in regular shape and removal of rubbish from the site etc. complete as per direction of Engineer-in-Charge in ground floor.	100 Sq.ft	15,579.11
		Sq.m.	1,676.92

S. No.	Description	Unit	Rate in Rs.
48	Colour-creting 1/8" (3.2 mm) thick 1:1:2 (1 white cement mixed with pigments, 1 marble powder, and 2 marble chips (zero No.) and scraping old damaged portion in regular shape and removal of rubbish from the site etc. complete as per direction of Engineer-in-Charge in ground floor.	100 Sq.ft	10,718.13
		Sq.m.	1,153.69
49	Snow-creting 1/8" (3.2 mm) thick 1:1:2 (1 white cement, 1 marble powder, and 2 marble chips zero No.) snow-crete in 1:2 in patches including dragging the surface with wire brushes, curing and scraping old damaged portion in regular) shape and removal of rubbish from the site etc. complete as per direction of Engineer-in-Charge in ground floor.	100 Sq.ft	6,343.13
		Sq.m.	682.77
50	Extra for colour creting for every additional 1/8" (3.2 mm) thickness over item 48..	100 Sq.ft	3,391.25
		Sq.m.	365.03
51	Extra for snow-creting 1/4" (6.4 mm) thick if marble chips of size (0-2) are used in place of 1 /8" (3.2 mm) thick snow-crete and course sand over item No. 49.	100 Sq.ft	1,703.75
		Sq.m.	183.39
52	Extra for patch plaster and finishing of any description of external faces on item no. 28 to 49..	100 Sq.ft	623.75
		Sq.m.	67.14
53	Extra for patch plaster and finishing of any description in basement, mezzanine and first floor on item No. 28 to 49.	100 Sq.ft	380.00
		Sq.m.	40.90
54	Extra for patch plaster and finishing of any description in every additional floor above first floor on item No. 28 to 49..	100 Sq.ft	237.50
		Sq.m.	25.56

C) REPLACING FLOORS DADO AND SKIRTING

S. No.	Description	Unit	Rate in Rs.
55	Replacing 3/8" (9.5 mm) thick white marble tiles upto 144 sq.in. (929 S.cm.) size in ground floor and setting in cement mortar 1:2 and washing the tiles with white cement slurry in floor, dado and skirting, etc., complete including curing, finishing, polishing and removing rubbish from the site..	100 Sq.ft	26,437.63
		Sq.m.	2,845.72
56	Extra for every additional 1/8" (3.2 mm) thickness of tile in item No. 55.	100 Sq.ft	4,887.50
		Sq.m.	526.09

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S. No.	Description	Unit	Rate in Rs.
57	Replacing 3/8" (9.5 mm) thick onyx tiles upto 144 Sq. inch (929 Sq.cm.) size in ground floor and setting in cement mortar 1:2 and washing the tiles with cement slurry of matching colour in floor, dado and skirting, etc., complete including curing finishing, polishing and removing rubbish from the site.	100 Sq.ft Sq.m.	54,255.13 5,839.97
58	Extra for every additional 1/8" (3.2 mm) thickness of tile in item No. 57..	100 Sq.ft Sq.m.	8,500.00 914.93
59	Replacing marble mosaic tiles 8" x 8" x 1/4" (203 mm x 203 mm x 6.4 mm) with 3/8" (9.5 mm) topping of approved design of light shade in white cement in ground floor, setting in cement mortar 1:2 and washing with cement slurry of matching colour in floor, dado and skirting etc. complete including curing finishing, polishing and removing, rubbish from the site.	100 Sq.ft Sq.m.	23,946.92 2,577.62
60	Replacing marble mosaic tiles 8" x 8" x 1/4" (203 mm x 203 mm x 6.4 mm) with 3/8" (9.5 mm) topping of approved design of dark shade in grey cement in ground floor, setting in cement mortar 1:2 and washing with cement slurry of matching colour in floor, dado and skirting etc. complete including, curing finishing, polishing and removing rubbish from the site.	100 Sq.ft Sq.m.	21,798.50 2,346.37
61	Replacing marble mosaic tiles 8" x 8" x 1/4" (203 mm x 203 mm x 6.4 mm) with 3/8" (9.5 mm) topping of approved design in grey cement in ground floor, setting in cement mortar 1:2 and washing with cement slurry of matching colour in floor, dado and skirting etc. complete including curing finishing, polishing and removing rubbish from the site	100 Sq.ft Sq.m.	20,107.01 2,164.30
62	Extra for every additional thickness of 1/8" (3.2 mm) topping in item No. 59.	100 Sq.ft Sq.m.	949.16 102.17
63	Extra for every additional thickness of 1/8" (3.2 mm) topping in item No. 60.	100 Sq.ft Sq.m.	966.42 104.02
64	Extra for every additional thickness of 1/8" (3.2 mm) topping in item No. 61.	100 Sq.ft Sq.m.	796.50 85.73
65	Replacing chequered marble mosaic tile 13" x 8" x 1" (330 mm x 203 mm x 25 mm) in grey cement, with 1/2" (13 mm) topping in ground floor and setting in cement mortar 1:2 over steps etc. complete including washing with cement slurry of matching colour, curing, finishing and removing rubbish from the site.	100 Sq.ft Sq.m.	24,699.39 2,658.62

S. No.	Description	Unit	Rate in Rs.
66	Replacing chequered marble mosaic tile 13" x 8" x 1 " (330 mm x 203 mm x 25 mm) of light shade in white cement, with 1/2" (13 mm) topping and 1/2" (13 mm) base in ground floor and setting in cement mortar 1:2 over steps etc. complete including washing with cement slurry of matching colour, curing, finishing and removing rubbish from the site .	100 Sq.ft Sq.m.	26,700.11 2,873.97
67	Replacing chequered marble mosaic tile 13" x 8" x 1" (330 mm x 203 mm x 25 mm) of dark shade in grey cement, with 1/2" (13 mm) topping and 1/2" (13 mm) base in ground floor and setting in cement mortar 1:2 over steps etc. complete including washing with cement slurry of matching colour, curing, finishing and removing rubbish from the site.	100 Sq.ft Sq.m.	24,943.88 2,684.93
68	Replacing 1/4" (6.4 mm) thick white glazed tiles 6" x 6" (152 mm x 152 mm) of approved foreign make in floor, dado and skirting etc. in ground floor and setting in cement mortar 1:2 and washing the tiles with, white cement slurry complete including curing, finishing and removal of rubbish from the site.	100 Sq.ft Sq.m.	17,911.73 1,928.00
69	Replacing 1/4" (6.4 mm) thick coloured glazed tiles 6" x 6" (152 mm x 152 mm) of approved foreign make in floor, dado and skirting etc. in ground floor and setting in cement mortar 1:2 and washing the tiles with cement slurry of matching colour complete including curing, finishing and removal of rubbish from the site.	100 Sq.ft Sq.m.	14,941.26 1,608.26
70	Replacing polyvinyle chloride (PVC) tiles 30 cm x 30 cm x 2.5 mm of approved shade and make with approved adhesive in floor, dado and skirting etc. complete in ground floor including removal of rubbish from the site.	100 Sq.ft Sq.m.	25,953.13 2,793.57
71	Replacing polyvinyle chloride (PVC) tiles 30 cm x 30 cm x 2.0 mm of approved shade and make with approved adhesive in floor, dado and skirting etc. complete in ground floor including removal of rubbish from the site.	100 Sq.ft Sq.m.	24,678.13 2,656.33
72	Replacing polyvinyle chloride (PVC) tiles 30 cm x 30 cm x 1.6 mm of approved shade and make with approved adhesive in floor, dado and skirting etc. complete in ground floor including removal of rubbish from the site..	100 Sq.ft Sq.m.	19,578.13 2,107.37

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S. No.	Description	Unit	Rate in Rs.
73	Replacing rubber tiles of approved shade, size 8" x 8" (203 mm x 203 mm) with approved adhesive in floor dado and skirting etc., complete in ground floor including removal of rubbish from the site..	100 Sq.ft Sq.m.	20,108.13 2,164.42
74	Replacing rubber tiles of approved shade, 12" x 12" (305 mm x 305 mm) size with approved adhesive in floor dado and skirting etc., complete in ground floor including removal of rubbish from the site .	100 Sq.ft Sq.m.	22,658.13 2,438.90
75	Replacing rubber tiles of approved shade, 24" x 24" (610 mm x 610 mm) size with approved adhesive in floor dado and skirting etc., complete in ground floor including removal of rubbish from the site ..	100 Sq.ft Sq.m.	26,483.13 2,850.62
76	Extra for using glazed tiles of size 4" x 4" or (102 mmx 102 mm) or below in item No. 68 and 69 .	100 Sq.ft Sq.m.	28,731.45 3,092.62
77	Replacing plain grey cement tiles 3/4" (19 mm) thick in floor, dado and skirting etc. in ground floor and, i setting in cement mortar 1:2 and washing the tiles with cement slurry of matching colour complete Including curing, finishing and removal of rubbish from the site: 8" x 8" (203 mm x 203 mm) size tiles.	100 Sq.ft Sq.m.	21,051.76 2,265.99
78	Replacing plain grey cement tiles 3/4" (19 mm) thick in floor, dado and skirting etc. in ground floor and setting in cement mortar 1:2 and washing the tiles with cement slurry of matching colour complete including curing, finished and removal of rubbish from the site of 6 x 6" (152 mm x 152 mm) size tiles.	100 Sq.ft Sq.m.	21,755.50 2,341.74
79	Replacing plain coloured cement tiles 3/4" (19 mm) thick light shade in floor, dado and skirting etc. in ground floor and setting in cement mortar 1:2 and washing the tiles with cement slurry of matching colour complete including curing, finishing and removal of rubbish from the site 8"' x 8" (203 mm x 203 mm) size tiles..	100 Sq.ft Sq.m.	21,566.28 2,321.37
80	Replacing plain coloured cement tiles 3/4" (19 mm) thick light shade in floor, dado and skirting etc. in ground floor and setting in cement mortar 1:2 and washing the tiles with cement slurry of matching colour complete including curing, finishing and removal of rubbish from the site: 6" x 6" (152 mm x 152 mm) size tiles .	100 Sq.ft Sq.m.	22,286.90 2,398.94

MAINTENANCE

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S. No.	Description	Unit	Rate in Rs.
81	Replacing plain coloured cement tiles 3/4 (19 mm) thick dark shade in floor, dado and skirting, etc. in ground floor and setting in cement mortar 1:2 and washing the tiles with cement slurry of matching colour complete including curing, finishing and removal of rubbish from the site: 8" x 8" (203 mm x203 mm) size tiles .	100 Sq.ft Sq.m.	20,381.79 2,193.88
82	Replacing plain coloured cement tiles 3/4" (19 mm) thick dark shade in floor, dado and skirting, etc. in ground floor and setting in cement mortar 1:2 and washing the tiles with cement slurry of matching colour complete including curing, finishing and removal of rubbish from the site: 6" x 6" (152 mm x 1 52 mm) size tiles .	100 Sq.ft Sq.m.	22,146.12 2,383.79
83	Replacing flowered or patterned cement tiles 3/4" (19 mm) thick in floor, dado and skirting etc. in ground floor and setting in cement mortar 1:2 and washing the tiles with cement slurry complete including curing, finishing and removal of rubbish from the site: 8" x 8" (203 mm x 203 mm) size tiles.	100 Sq.ft Sq.m.	20,149.94 2,168.92
84	Replacing flowered or patterned cement tiles 3/4" (19 mm) thick in flo.or, dado and skirting etc. in ground floor and setting in cement mortar 1:2 and washing the tiles with cement slurry complete including curing, finishing and removal of rubbish from the site: 6" x 6" (152 mm x 152 mm) size.	100 Sq.ft Sq.m.	20,129.38 2,166.71
85	Replacing grey cement chequered tiles 13" X 8" x 1" (330 mm x 203 mm x 25 mm) in treads and plain in risers in ground floor and setting in cement mortar 1:2 and washing the tiles with cement slurry complete including curing, finishing and removal of rubbish from the site..	100 Sq.ft Sq.m.	17,893.08 1,925.99
86	Replacing coloured cement chequered tiles 13' x 8" x 1" (330 mm x 203 mm x 25 mm) in treads and plain in risers of light shade in ground floor and setting in cement mortar 1:2 & washing the tiles with cement slurry of matching colour complete including curing, finishing and removal of rubbish from the site.	100 Sq.ft Sq.m.	22,153.38 2,384.57
87	Replacing coloured cement chequered tiles 13" x 8" x 1" (330 mm x 203 mm x 25 mm) in treads and plain in risers of dark shade in ground floor and setting in cement mortar, 1:2 and washing the tiles with cement slurry of matching colour complete including curing, finishing and removal of rubbish from the site .	100 Sq.ft Sq.m.	18,563.37 1,998.14

MAINTENANCE
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S. No.	Description	Unit	Rate in Rs.
88	Replacing burnt brick floor laid on edge in ground floor and setting in cement mortar 1:6 including filling joints and pointing with cement mortar 1:3 including curing and removal of rubbish from the site.	100 Sq.ft Sq.m.	7,523.30 809.80
89	Replacing 1" (25 mm) thick 1:2:4 cement concrete floor in patches complete in ground floor including form work, watering, curing etc. and dismantling the damaged floor in regular shape and removal of rubbish from the site.	100 Sq.ft Sq.m.	4,334.64 466.58
90	Replacing 1 -1 /2" (38 mm) thick 1:2:4 cement concrete floor in patches complete in ground floor including form work, watering, curing etc. and dismantling the damaged floor in regular shape and removal of rubbish from the site .	100 Sq.ft Sq.m.	6,034.22 649.52
91	Replacing 2" (51 mm) thick 1:2:4 cement concrete floor in patches complete in ground floor including form work, watering, curing etc. and dismantling the damaged floor in regular shape and removal of rubbish from the site.	100 Sq.ft Sq.m.	7,747.41 833.92
92	Replacing 3" (76 mm) thick.1:2:4 cement (concrete floor in patches complete in ground floor including form works, watering, curing etc. and dismantling the damaged floor in regular shape and removal of rubbish from the site	100 Sq.ft Sq.m.	10,686.59 1,150.29
93	Extra for floor replacement of any description in basement, mezzanine and first floor in item No. 55 57, 59 to 61,65 to 75 and 77 to 92.	100 Sq.ft Sq.m.	736.25 79.25
94	Extra for floor replacement of any description for every additional floor above first floor in item No. 55, 57, 59 to 61,65 to 75 and 77 to 92.	100 Sq.ft Sq.m.	878.75 94.59
95	Replacing best quality teak wood block flooring 3/4" (19 mm) thick as per existing pattern and design in any floor including dismantling and removal of rubbish from the site etc. complete as per direction of the Engineer-in-Charge .	Sq.ft. Sq.m.	1,659.05 17,857.85
96	Extra for every additional 1/4" (6.4 mm) thickness in item No. 95	Sq.ft. Sq.m.	501.87 5,402.07
97	Replacing best quality shesham wood block flooring 3/4" (19 mm) thick as per existing pattern and design in any floor including dismantling and removal of rubbish from the site etc. complete as per direction of the Engineer-in-Charge..	Sq.ft. Sq.m.	667.30 7,182.76

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S. No.	Description	Unit	Rate in Rs.
98	Extra for every additional 1/4" (6.4 mm) thickness over item No. 97 .	Sq.ft. Sq.m.	160.51 1,727.72
99	Replacing best quality teak wood planks 3/4" (19 mm) thick with screws in any floor including dismantling and removal of rubbish from the site etc. complete in any floor as per direction of the Engineer-in-Charge .	Sq.ft. Sq.m.	1,557.17 16,761.22
100	Extra for every additional 1/4" (6.4 mm) thickness over item No. 99 .	Sq.ft. Sq.m.	501.87 5,402.07
101	Replacing best quality shesham wood planks 3/4" (19 mm) thick with screws in any floor including dismantling and removal of rubbish from the site etc. complete as per direction of the Engineer-in-Charge.	Sq.ft. Sq.m.	499.88 5,380.69
102	Extra for every additional 1/4" (6.4 mm) thickness in item No. 101 .	Sq.ft. Sq.m.	147.34 1,585.97
103	Replacing best quality deodar wood frame under flooring including dismantling and removal of rubbish from the site etc. complete as per direction of the Engineer-in-Charge.	Cft. Cu.m.	12,266.48 433,186.99
104	Replacing best quality deodar wood frame under flooring in any floor and refixing the existing wooden flooring including removal of rubbish from the site etc. complete as per direction of the Engineer-in-Charge	Cft. Cu.m.	11,187.47 395,082.00
	D) REPLACING WIRE GAUZE AND EXPANDED METAL		
105	Replacing brass wire gauze of 22 gauge and 144 mesh per Sq inch including replacing the beading where necessary with best quality imported teak wood of existing design and section with brass screws including dismantling wire gauze etc. and removal of rubbish as required .	Sq.ft. Sq.m.	1,360.82 14,647.74
106	Replacing G.I. wire gauze of 22 gauge and 144 mesh per Sq.inch including replacing the beading where necessary with best quality deodar wood of existing design and section with iron screw including dismantling wire gauze etc. and removal of rubbish as required .	Sq.ft. Sq.m.	214.64 2,310.31

MAINTENANCE

SUB-HEAD CODE 125

S. No.	Description	Unit	Rate in Rs.
107	Replacing expanded metal 3/4" x 2-1/2" (19 mm x 64 mm) mesh 12 gauge (2.1 mm) of approved quality including replacing the beading where necessary wrth best quality imported teak wood of existing design and section with iron screws including dismantling expanded metal and removal of rubbish.	Sq.ft. Sq.m.	294.74 3,172.55
108	Replacing expanded metal 3/4" x 2-1/2" (19 mm x 64 mm) mesh 12 gauge (2.1 mm) of approved quality including replacing the beading where necessary with best quality deodar wood of existing design and section with iron screws including dismantling expanded metal and removal of rubbish.	Sq.ft. Sq.m.	176.51 1,899.94
	E) REPLACING ROOF WORK		
109	Replacing G.I. ridges or valley 22 BWG (1.15 mm) including fixing with 'J' hooks bolts and nuts and washers etc. where necessary and stacking old stuff as directed in ground floor.	Rft. Ru.m.	518.45 1,700.97
110	Replacing worn out corrugated G.I. sheets of 18 BWG (1.4 mm) including fixing with J' hooks, bolts, nuts and washers etc. where necessary and stacking old stuff as directed in ground floor .	100 Sq.ft. Sq.m.	53,958.75 5,808.07
111	Replacing worn out corrugated G.I. sheet of 22 BWG (1.15 mm) including fixing with 'J' hooks, bolts, nuts and washers etc. where necessary and stacking old stuff as directed in ground floor.	100 Sq.ft. Sq.m.	35,734.68 3,846.45
112	Replacing worn out corrugated G.I. sheet of 24 BWG (1.06 mm) including fixing with J' hooks, bolts, nuts and washers etc. where necessary and stacking old stuff as directed in ground floor.	100 Sq.ft. Sq.m.	30,148.20 3,245.12
113	Replacing worn out corrugated G.I. sheets of 26 BWG (0.97 mm) including fixing with J' hooks, bolts, nuts and washers etc. where necessary and stacking old stuff as directed in ground floor.	100 Sq.ft. Sq.m.	24,943.86 2,684.93
114	Replacing two piece close fittings or plain wing hip adjustable AC sheet ridges (grey) 1/4" (6.4 mm) thick including fixing wrth bolt, nuts and washers etc. and stacking the old stuff as directed in ground floor .	Rft. Ru.m.	901.71 2,958.35
115	Replacing two piece close fittings adjustable coloured AC sheet ridges 5/22" (5.8 mm) thick including fixing with 'J' hooks bolts, nuts and washers etc. and stacking the old stuff as directed in ground floor.	Rft. Ru.m.	520.51 1,707.71

MAINTENANCE

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S. No.	Description	Unit	Rate in Rs.
116	Replacing corrugated asbestos sheet 1/4" (6.4 mm) thick including fixing with 'J' hooks bolts, nuts and washers etc. and stacking the old stuff as directed in ground floor	100 Sq.ft	19,329.52
		Sq.m.	2,080.61
117	Replacing coloured corrugated asbestos sheet 5/32" (9 mm) thick including fixing with 'J' hooks bolts, nuts and washers etc. and stacking the old stuff as directed in ground .	100 Sq.ft	16,737.77
		Sq.m.	1,801.64
118	Replacing plain asbestos cement sheet 1/4" (6.4 mm) thick ceiling with wooden beading 2" x 1/2" (51 mm x 13 mm) as required but excluding the cost of frame in ground floor.	100 Sq.ft	18,977.00
		Sq.m.	2,042.66
119	Replacing soft board ceiling 1/2" (13 mm) thick with wooden beading 2" x 1/2" (51 mm x 13 mm) as required but excluding the cost of frame in ground floor .	100 Sq.ft	21,523.70
		Sq.m.	2,316.79
120	Replacing hessian cloth ceiling with deodar wood beading 2" x 1/2" (51 mm x 13 mm) as required but excluding the cost of frame in ground floor.	100 Sq.ft	12,891.32
		Sq.m.	1,387.61
121	Replacing manglore ridges and hip tiles including disposing of the broken ones as directed by the Engineer-in-Charge in ground floor.	Rft.	111.00
		Ru.m.	364.17
122	Replacing manglore tiles and disposing of the broken ones as directed by the Engineer-in-Charge .	Each	128.38
			128.38
123	Replacing burnt clay tiles 12" x 12" X 2" (303 mm X 303 mm X 51 mm) and setting in cement mortar 1:4 including curing etc. in ground floor.	Each	90.30
			90.30
124	Replacing 'on roof ruberiod 3 ply rellia roofing including asphalt saturated felt underlay each treated with rubberiod compound including providing flasing and finished with washed gravel @ 3 Cft/100 Sft.(.009 Cu.m. per Sq.m.) and disposing of the rubbish from the site etc. complete as directed by the Engineer-in-Charge in ground floor.	100 Sq.ft	28,739.16
		Sq.m.	3,093.45

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S. No.	Description	Unit	Rate in Rs.
125	Replacing on roof blanco roofing felt 2 ply over a tack coat of bitumen at 30 Lbs. per %Sft. (1.46 Kg. per Sq.m) and sealed with bitumen compound at 30 Lbs. per %Sft. (1.46 Kg. per Sq.m.) and blinding with washed gravel 3/8" (9.5 mm) downward at the rate of 3 Cft/100 Sft (.009 Cu.m. per Sqm.) including ramming with thappies and disposing of the rubbish from the site complete as directed by the Engineer-in-Charge in ground floor.	100 Sq.ft	20,000.38
		Sq.m.	2,152.82
126	Replacing jutoid water proof matting 1/8" (3.2 mm) thick on top of roofs with adhesive No. 70 at the rate of 10 Lbs. per % Sft. (.49 Kg. per Sq.m.) diluted with 13 % of solvent like kerosine oil etc. including the cost of overlaps, cleaning and scraping the surface with wire brushes and disposing of the rubbish from the site etc. complete as directed by the Engineer-in-Charge in ground floor.	100 Sq.ft	11,276.00
		Sq.m.	1,213.74
127	Replacing jutoid water proof matting 1/12" to 1/16" (2.1 mm to 1.6 mm) thick on top of roof with adhesive No. 70 at the rate of 10 Lbs. per %Sft. (.49 Kg. per Sq.m.) diluted with 13% of solvent like kerosine oil etc. including the cost of overlaps, cleaning and scraping the surface with wire brushes and disposing of the rubbish from the site etc. complete as directed by the Engineer-in-Charge in ground floor.	100 Sq.ft	9,213.50
		Sq.m.	991.73
128	Providing and laying in patches in roof, plastic bitumen No. 3 or No. 4 at the rate of 30 Lbs with, 1-1/2 Cft. of coarse sand per %Sft. (1.46 Kg. with 0.0424 Cu.m. of coarse sand per Sq.m.) over a coat of light diesel oil primining at 15 Lbs. per %Sft. (0.73 Kg. per Sq.m.) including light ramming with thappies etc. complete in ground floor .	100 Sq.ft	4,493.85
		Sq.m.	483.71
129	Providing and laying in patches on roof heated asphalt at the rate of 40 Lbs. per %Sft. (1.95 Kg. per Sq.m.) finished with washed gravel 3/8" (9.5 mm) down grade at 3 Cft. per %Sft. (.009 Cu.m. per Sq.m.) including ramming with thappies etc. complete in ground floor.	100 Sq.ft	5,325.63
		Sq.m.	573.24
130	Replacing lime concrete 1:2:4 terracing on roof in patches including curing, dismantling and, removing rubbish of damaged roof as directed by the Engineer-in Charge in ground floor.	100 Cft	25,452.30
		Cum	8,988.40
131	Providing mud plaster 2" (51 mm) thick mixed with cowdung and bhusa mixed in the ratio of 100 Cft. (2.83 Cum.) of mud and 5 Lbs/Cft. (80 Kg per Cu.m.) of bhusa and 5 Cft. (0.14 Cum.) gobri including gobri tepai on top of roof in ground floor.	100 Sq.ft	4,014.65
		Sq.m.	432.13

MAINTENANCE
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S. No.	Description	Unit	Rate in Rs.
132	Extra or deduct for every 1/2" (13 mm) depth in item No. 131 .	100 Sq.ft	669.19
		Sq.m.	72.03
133	Extra for roof work in first floor on items 109 to-131	100 Sq.ft	593.75
		Sq.m.	63.91
134	Extra for roof work in every additional floor above first floor in item 109 to 131	100 Sq.ft	285.00
		Sq.m.	30.68
	F) REPLACING WOOD WORK		
135	Replacing and fixing with screws, best quality imported teak wood doors and window stops as directed in all floors .	Each	556.51
			556.51
136	Replacing and fixing with screws best quality deodar wood doors and window stops as directed in all floors	Each	337.76
			337.76
137	Replacing and fixing best quality Burmah teak wood door and window cleats including cost of brass hinges and screws fittings as directed in all floors.	Each	573.54
			573.54
138	Replacing ,and fixing best quality deodar wood door and window cleats including iron hinges and screws fittings as directed in all floors	Each	277.40
			277.40
139	Replacing rotten or broken best quality deodar wood rafters, purlins and battens etc. including painting to match the existing finish in all floors	Cft.	12,043.13
		Cu.m.	425,299.35
140	Replacing rotten or broken best quality sal wood (3" to 6" (76 mm to 152 mm dia) ballies, rafters and purlins etc. including painting to match the existing finish in all floors	Rft.	136.94
		Ru.m.	1,473.45
141	Replacing worn out frames of best quality Burmah teak wood in doors, windows and ventilators etc., in all floors.	Cft.	22,196.16
		Cu.m.	783,850.58
142	Replacing worn out frames of best quality deodar wood in doors, windows and ventilators etc. in all floors .	Cft.	12,767.81
		Cu.m.	450,891.44
143	Replacing worn out frames of best quality shisham wood tn doors, windows and ventilators etc. in all floors .	Cft.	6,596.24
		Cu.m.	232,944.07

MAINTENANCE

SUB-HEAD CODE 125

S. No.	Description	Unit	Rate in Rs.
	G) RENEWAL COAT OF WHITE WASH, COLOUR WASH AND PAINTING		
144	White washing one renewal coat to walls and ceiling etc., including cleaning the old surface in any floor.	100 Sq.ft.	183.13
		Sq.m.	19.71
145	White washing two renewal coats to wall and ceiling etc. including cleaning the old surface in any floor .	100 Sq.ft.	253.75
		Sq.m.	27.31
146	White washing three renewal coats to walls and ceiling etc. including cleaning the old surface in any floor..	100 Sq.ft.	332.50
		Sq.m.	35.79
147	Colour washing one renewal coat to walls and ceiling etc. including cleaning the old surface in any floor ..	100 Sq.ft.	188.75
		Sq.m.	20.32
148	Colour washing two renewal coats to walls and ceiling etc. including cleaning the old surface in any floor ...	100 Sq.ft.	259.38
		Sq.m.	27.92
149	Colour washing three renewal coats to walls and ceiling etc. including cleaning the old surface in any floor..	100 Sq.ft.	340.00
		Sq.m.	36.60
150	Chalk washing one renewal coat to walls and ceiling etc. including cleaning the old surface in any floor.	100 Sq.ft.	200.42
		Sq.m.	21.57
151	Chalk washing two renewal coats to walls and ceiling etc. including cleaning the old surface in any floor.	100 Sq.ft.	284.59
		Sq.m.	30.63
152	Chalk washing three renewal coats to walls and ceiling etc. including cleaning the old surface in any floor.	100 Sq.ft.	368.76
		Sq.m.	39.69
153	Cement washing one renewal coat to walls and ceiling etc. including cleaning the old surface in any floor.	100 Sq.ft.	354.38
		Sq.m.	38.14
154	Cement washing two renewal coats to walls and ceiling etc. including scraping and cleaning the old surface in any floor.	100 Sq.ft.	415.00
		Sq.m.	44.67
155	Cement washing three renewal coats to walls and ceiling etc. including scraping and cleaning the old surface in any floor .	100 Sq.ft.	479.38
		Sq.m.	51.60
156	Snow ceming/duracem one renewal coat to walls and ceiling etc. including cleaning the old surface in any floor.	100 Sq.ft.	1,322.50
		Sq.m.	142.35
157	Snow ceming /duracem two renewal coats to walls and ceiling etc. including cleaning the old surface in any floor.	100 Sq.ft.	1,673.75
		Sq.m.	180.16

MAINTENANCE
SUB-HEAD CODE 125

S. No.	Description	Unit	Rate in Rs.
158	Distempering one renewal coat with vinyle distemper (Paintex ICI Dulux) of approved make and shade to walls and ceiling etc., including scraping the old surface in any floor.	100 Sq.ft. Sq.m.	1,260.00 135.63
159	Distempering two renewal coats with vinyle distemper (Paintex ICI Dulux) of approved make and shade to walls and ceiling etc., including scraping cleaning the old surface in any floor .	100 Sq.ft. Sq.m.	2,147.50 231.15
160	Distempering three renewal coats with vinyle distemper (Paintex ICI Dulux) of approved make and shade to walls and ceiling etc., including scraping cleaning the old surface in any floor .	100 Sq.ft. Sq.m.	2,681.25 288.61
161	Repainting two coats with enamel paint of approved make and shade to wood work including scraping and sand papering the surface as directed by Engineer-in-Charge in any floor.	100 Sq.ft. Sq.m.	2,189.38 235.66
162	Repainting one coat with Enamel paint of approved make and shade to iron work including scraping and cleaning the surface as directed by the Engineer-in-Charge in any floor	100 Sq.ft. Sq.m.	1,990.63 214.27
163	Repainting two coats with enamel paint (Robialac) of approved make and shade to iron work including scraping and sand papering the surface as directed by the Engineer-in-Charge in any floor.	100 Sq.ft. Sq.m.	2,750.00 296.01
164	Repainting one coat with enamel paint (Robialac) of approved make and shade to wood work including cleaning and sand papering the surface as directed by the Engineer-in-charge in any floor.	100 Sq.ft. Sq.m.	1,907.50 205.32
165	Repainting two coats with enamel paint (Robialac) of approved make and shade to wood work including cleaning and sand papering the surface as directed by the Engineer-in-charge in any floor.	100 Sq.ft. Sq.m.	2,952.50 317.80
166	Repainting one coats with plastic emulsion paint of (ICI) Dulux make and shade to walls and ceiling including cleaning, and sand papering the surface as directed by the Engineer-in-charge in any floor.	100 Sq.ft. Sq.m.	1,635.00 175.99
167	Repainting two coats with plastic emulsion paint of (ICI) Dulux make and shade to walls and ceiling including cleaning, and sand papering the surface as directed by the Engineer-in-charge in any floor.	100 Sq.ft. Sq.m.	2,578.13 277.51

MAINTENANCE

SUB-HEAD CODE 125

S. No.	Description	Unit	Rate in Rs.
168	Repainting one coat with weather shield paint of (ICI) Dulex make and shade on plaster surface (External) including cleaning, sand papering the surface as directed by the Engineer-in-charge in any floor.	100 Sq.ft. Sq.m.	1,473.13 158.57
169	Repainting two coats with weather shield paint of (ICI) Dulux make and shade on plaster surface (External) including cleaning, sand papering the surface as directed by the Engineer-in-charge in any floor.	100 Sq.ft. Sq.m.	2,546.88 274.14
170	Repainting one coat with enamel paint of approved make and shade to plastered surface etc., including sand papering the surface as directed by the Engineer-in-Charge in any floor .	100 Sq.ft. Sq.m.	1,907.50 205.32
171	Repainting two coats with enamel paint of approved make and shade to plastered surface etc.. including sand papering the surface as directed by the Engineer-in-Charge in any floor.	100 Sq.ft. Sq.m.	2,952.50 317.80
172	Repainting one coat with coaltar to plastered surface and wood work etc., including cleaning the surface as directed by the Engineer-in-Charge in any floor.	100 Sq.ft. Sq.m.	1,177.89 126.79
173	Repainting two coats with coaltar to plastered surface and wood work etc., including cleaning the surface as directed by the Engineer-in-Charge in any floor.	100 Sq.ft. Sq.m.	1,602.05 172.44
174	Repainting one coat with black Japan to wood or iron work in any floor, including sand papering the surface ...	100 Sq.ft. Sq.m.	1,154.38 124.26
175	Repainting two coats including scraping, cleaning with black Japan to wood or iron work in any floor.	100 Sq.ft. Sq.m.	1,470.00 158.23
176	Repainting one coat with creosote or solignum to wood work etc including cleaning the old surface as directed by the Engineer-in-Charge in any floor.	100 Sq.ft. Sq.m.	1,767.13 190.21
177	Repainting two coats with creosote or solignum to wood work etc., including cleaning the old surface as directed by the Engineer-in-Charge in any floor.	100 Sq.ft. Sq.m.	2,970.63 319.76
178	Repainting one coat with surfix boiler composition of approved manufacture on interior surface including scraping and sand papering the surface as directed by the Engineer-in-Charge .	100 Sq.ft. Sq.m.	2,443.75 263.04

MAINTENANCE

SUB-HEAD CODE 125

S. No.	Description	Unit	Rate in Rs.
179	Repainting two coats with surfix boiler composition of approved manufacture on interior surface including scraping and sand papering the surface as directed by the Engineer-in-Charge .	100 Sq.ft. Sq.m.	4,285.63 461.30
180	Repainting two coats with surfix boiler composition of approved manufacture on exterior surface including scraping and sand papering the surface as directed by the Engineer-in-Charge.	100 Sq.ft. Sq.m.	4,393.25 472.89
181	Repainting one coat with Barico paint of approved manufacture on steel work including sand papering the surface as directed by the Engineer-in-Charge in any floor	100 Sq.ft. Sq.m.	1,425.63 153.45
182	Repainting two coats with Barico paint of approved manufacture on steel work including scraping and sand papering the surface as directed by the Engineer-in-Charge in any floor .	100 Sq.ft. Sq.m.	2,142.50 230.62
183	Repainting one coat with Bituminous aluminium paint of approved make on steel work including sand papering the surface as directed by the Engineer-in-Charge in any floor .	100 Sq.ft. Sq.m.	1,425.63 153.45
184	Repainting two coats with Bituminous aluminium paint of approved make on steel work including scraping and sand papering the surface as directed by the Engineer-in-Charge in any floor.	100 Sq.ft. Sq.m.	2,142.50 230.62
185	Repainting one coat with Robbialac aluminium paint of approved make on steel work including sand papering the surface as directed by the Engineer-in-Charge in any floor.	100 Sq.ft. Sq.m.	1,548.63 166.69
186	Repainting two coats with Robbialac aluminium paint of approved make on steel work including scraping and sand papering the surface as directed by the Engineer-in-Charge in any floor .	100 Sq.ft. Sq.m.	2,398.75 258.20
187	Repainting one coat with Robbialac alkali resisting paint of approved make and shade to plastered surface etc.. including sand papering the surface as directed by the Engineer-in-Charge in any floor .	100 Sq.ft. Sq.m.	1,263.63 136.02
188	Repainting two coats with Robbialac alkali resisting paint of approved make and shade to plastered surface etc., including scraping and sand papering the surface as directed by the Engineer-in-Charge in any floor	100 Sq.ft. Sq.m.	1,805.00 194.29

MAINTENANCE

SUB-HEAD CODE 125

S. No.	Description	Unit	Rate in Rs.
189	Repainting one coat with latex flat evershine paint of approved make and shade to plastered surface including scraping and sand papering the surface as directed by the Engineer-in-Charge in any floor .	100 Sq.ft. Sq.m.	1,575.63 169.60
190	Repainting two coats with latex flat evershine paint of approved make and shade to plastered surface including scraping and sand papering the surface as directed by the Engineer-in-Charge in any floor.	100 Sq.ft. Sq.m.	2,455.00 264.25
191	Repainting one coat with acid resisting paint of approved make and shade including sand papering the surface as directed by the Engineer-in-Charge in any floor.	100 Sq.ft. Sq.m.	1,367.13 147.16
192	Repainting two coats with acid resisting paint of approved make and shade including scraping and sand papering the surface as directed by the Engineer-in-Charge in any floor.	100 Sq.ft. Sq.m.	2,612.63 281.22
193	Varnishing one renewal coat of approved make to wood work including cleaning the old surface as directed the Engineer-in-Charge in any floor .	100 Sq.ft. Sq.m.	1,222.63 131.60
194	Varnishing two renewal coats of approved make to wood work including cleaning the old surface as directed the Engineer-in-Charge in any floor .	100 Sq.ft. Sq.m.	1,991.88 214.40
195	French polishing one renewal coat of approved make to wood work including cleaning the old surface as directed Engineer-in-Charge in any floor.	100 Sq.ft. Sq.m.	3,006.25 323.59
196	French polishing two renewal coats of approved make to wood work including cleaning the old surface as directed by the Engineer-in-Charge in any floor	100 Sq.ft. Sq.m.	5,478.13 589.66
197	Bee wax polishing to wood work including cleaning the surface as directed by the Engineer-in-Charge in any floor.	100 Sq.ft. Sq.m.	3,082.98 331.85
198	Repainting enamel paint to pipes including specials 1/2" to 1" (15 mm to 25 mm) dia one coat including sand papering etc., complete.	100 Rft. Ru.m.	925.00 30.34
199	Repainting enamel paint to pipes including specials 1-1/4" (32 mm) to 2-1/2" (65 mm) dia, one coat including sand papering etc., complete.	100 Rft. Ru.m.	1,831.88 60.10

MAINTENANCE

SUB-HEAD CODE 125

S. No.	Description	Unit	Rate in Rs.
200	Repainting enamel paint to pipes including specials 3" (80 mm) dia, one coat including sand papering etc., complete .	100 Rft.	2,584.38
		Ru.m.	84.79
201	Repainting enamel paint to pipes including specials 4" (100 mm) dia, one coat including sand papering etc., complete .	100 Rft.	3,316.88
		Ru.m.	108.82
202	Repainting enamel paint to pipes including specials 5" to 6" (125 mm to 150 mm) dia, one coat including sand papering etc., complete .	100 Rft.	4,102.50
		Ru.m.	134.60
203	Repainting enamel paint to pipes including specials 1/2" to 1" (15 mm to 25 mm) dia, two coats including scraping and sand papering etc., complete.	100 Rft.	1,370.00
		Ru.m.	44.95
204	Repainting enamel paint to pipes including specials 1-1/2" to 2-1/2" (40 mm to 65 mm) dia, two coats including scraping and sand papering etc., complete .	100 Rft.	2,767.50
		Ru.m.	90.80
205	Repainting enamel paint to pipes including specials 3" (80 mm) dia, two coats including scraping and sand papering etc., complete	100 Rft.	3,971.88
		Ru.m.	130.31
206	Repainting enamel paint to pipes including specials 4" (100 mm) dia, two coats including scraping and sand papering etc., complete .	100 Rft.	5,126.88
		Ru.m.	168.20
207	Repainting enamel paint to pipes including specials 5" (125 mm) to 6" (150 mm) dia, two coats including scraping and sand papering etc., complete .	100 Rft.	6,390.00
		Ru.m.	209.65
208	Applying one renewal coat with Zinc Chromate (primer) of approved make including scraping and sand papering the surface as directed by the Engineer-in-Charge in any floor.	100 Sq.ft.	1,228.25
		Sq.m.	132.21
209	Applying one renewal coat with synthetic red or white lead primer of approved make including scraping and sand papering the surface as directed by the Engineer-in-Charge in any floor.	100 Sq.ft.	1,467.50
		Sq.m.	157.96
210	Applying one renewal coat with synthetic red oxide primer of approved make including scraping and sand papering the surface as directed by the Engineer-in-Charge in any floor.	100 Sq.ft.	1,467.50
		Sq.m.	157.96

MAINTENANCE

SUB-HEAD CODE 125

S. No.	Description	Unit	Rate in Rs.
	H) REPLCING GLASS WORK		
211	Replacing glass panes of 16 oz. per Sft. (1.7 mm)' approx. with iron nails and putty including removing broken ones if required in all floors .	Sq.ft.	196.56
		Sq.m.	2,115.78
212	Replacing glass panes of 18 oz. per Sft. (2.40 mm) approx. with iron nails and putty including removing broken ones if required in all floors .	Sq.ft.	200.91
		Sq.m.	2,162.53
213	Replacing glass panes of 24 oz. per Sft. (3.00 mm) approx. with iron nails and putty including removing broken ones if required in all floors .	Sq.ft.	234.06
		Sq.m.	2,519.43
214	Replacing glass panes of 26 oz. per Sft. (3.40 mm) approx. with iron nails and putty including removing broken ones if required in all floors .	Sq.ft.	240.31
		Sq.m.	2,586.70
215	Replacing glass panes of 32 oz. per Sft. (4.00 mm) approx. with iron nails and putty including removing broken ones if required in all floors .	Sq.ft.	252.81
		Sq.m.	2,721.25
216	Replacing polished plate glass 1/4" (6.4 mm) thick with iron nails and putty including removing broken ones if required in all floors.	Sq.ft.	395.31
		Sq.m.	4,255.10
217	Replacing polished wire reinforced glass 1/4" (6.4 mm) thick with iron nails and putty including removing broken ones if required in all floors .	Sq.ft.	610.94
		Sq.m.	6,576.07
218	Replacing polished glass sheet 3/16" (4.8 mm) thick with iron nails and putty including removing broken ones if required in all floors .	Sq.ft.	254.69
		Sq.m.	2,741.43
219	Extra for frosted glass on item No. 217 to 224.	Sq.ft.	15.00
		Sq.m.	161.46
220	Replacing figured glass 44 oz. (5.40 mm) approx. with iron nails and putty including removing broken ones if required in all floors.	Sq.ft.	382.81
		Sq.m.	4,120.56
221	Replacing figured glass 32 oz. (4.00 mm) approx. with iron nails and putty including removing broken ones if required in all floors.	Sq.ft.	277.81
		Sq.m.	2,990.35
222	Replacing figured glass 3/16" (4.8 mm) thick with iron nails and putty including removing broken ones if required in all floors.	Sq.ft.	317.19
		Sq.m.	3,414.17

MAINTENANCE
SUB-HEAD CODE 125

S. No.	Description	Unit	Rate in Rs.
223	Replacing coloured glass panes of sizes upto 4 mm thickness with iron nails and putty including removing broken ones if required in all floors .	Sq.ft.	315.31
		Sq.m.	3,393.99
224	Replacing mirror glass 32 Oz. (4.00 mm) approx, imported with iron nails and putty including removing broken ones if required in all floors .	Sq.ft.	307.81
		Sq.m.	3,313.26
225	Replacing impregnated mica glass (imported) with iron nails and putty including removing broken ones if required in all floors.	Sq.ft.	632.50
		Sq.m.	6,808.17
226	Extra for fixing glass panes of any description with imported teak wood fillets including replacing the fillets polishing or painting to match the existing finish .	Sq.ft.	236.56
		Sq.m.	2,546.34
227	Extra for fixing glass panes of any description with deodar wood fillets including replacing the fillets polishing or painting to match the existing finish.	Sq.ft.	108.44
		Sq.m.	1,167.21
228	Renewing putty and nails or glass panes in all floors .	Sq.ft.	108.44
		Sq.m.	1,167.21
229	Easing doors, windows and ventilators in all floors.	Each	72.19
		Each	777.02
230	Cleaning glass panes including removing stains etc. in all floors.	Sft	25.63
		Sqm	275.82
232	Replacing tinted glass 5mm thick aluminium and iron window with rubber packing including removing broken ones if required in all floors .	Sft	402.34
		Sqm	4,330.79

HORTICULTURE

Code 126

SPECIFICATION OF HORTICULTURE (SH-126)

GENERAL:-

The basic requirement for all fine lawns is an adequate soil for the roots to grow it. The best soil is a good loam consisting of clay and sand together with humus decayed animal manure. In clay soil add more sand to make it morum. If the soil is stoney then remove the stone surface at 1½' & re-fill with loam soil.

The following pre-planting steps shall be required for laying a lawn.

i) Careful grading for good drainage.
ii) Incorporating organic matter and other soil amendments, which are needed for proper growth and easy maintenance.
iii) Blending of top soil with native soil is done to make a transitional layer between top soil and native soil as it avoids trapping roots.

SCALPING OLD LAWNS:-

I) The old lawn contains noxious weed grasses and water logging mostly.
II) To replace the old lawn 1' foot soil is to be removed so that general weed roots and all alive should be removed.

TOP SOIL:-

The lawn area if raised it shall be filled in with top soil which should have as under:-

i) Crumbly texture.
ii) Lack of salinity.

If the depth of the soil is 8" - 12", it can hold grass fairly but for lesser depth when topsoil is laying above a soil of different texture, water may back up at the plane where the old and new soils meet. The roots will not grown throughly to their best depth. For this purpose top soil should be mixed with loam sandy animal manure.

EXTREME ACID OR ALKALINE CONDITIONS:-

An extreme acid or alkaline condition in a soil will limit availability of some nutrients and thereby limit a lawns performance in it. In rain fall areas where acidic soils and alkaline problems. The soil should be tested.

To correct an undesirable condition:-

If the soil is acidic enough to limit growth (PH value 5.5) fertilizer it by applying lime (calcium, carbonate) is the best farm toe make it rich. The hydrant lime may be applied at the rates of 50 to 75 pounds per 1,000 square feet.

In case of an-alkaline soil where the PH value is above 8.3 or 8.5 then Gypsum should be used at the rate's of 35 to 50 pounds per 1,000 square feet.
Soil in Pakistan are mostly alkaline.

MIXING NUTRIENTS IN TO ROOTING AREA:-

The three plant food elements most needed by a lawn or garden are nitrogen, phosphorus and potash. A lawn will need applications of fertilizer containing nitrogen specially. This shall be in the form of ammonium sulphate. Before the soil is cultivated, evenly spread 40 pounds of single super-phosphate per 1,000 square feet. In rain fall area the surface makes thoroughly with potash 10 pounds per 1,000 square feet area.

Where large quantities of sawdust and iron sulfate at a ratio of 5 to 10 pounds per 1,000 square feet.

The organic matter of manure be apply in sandy and clay soil to make it morum.

IMPROVING SOIL AREATION WITH QUANTITIES OF ORGANIC SOIL:-

During the dry season watering intervals are to be lengthened 30 to 40 by volume of porous soil is added to the native soil.

AMENDEMENTS:-
One of the following methods shall be used to achieve soil amendments:-

Use sawdust with mix nitrogen fertilizer and makes it 3" deep mix in 55 pounds of ammonium sulfate or 35 pounds of ammonium nitrate. Nitrogen may also be added.

Apply 25 Lbs of calcium Cyanamid per 1,000 square feet before spreading and blending in the saw dust and thereafter use 35 Lbs per 1,000 Sft of Calcium Cyanamid on the finished bed after spreading rake it well. To blend the material with the surface 1" to ½" to keep most sprinkly daily for 30-days to test sow radish seeds on the soil if they germinate in a few days and begin to form leaves, the soil is safe for grass seed.

MAKING THE LAWN BED SMOOTH:-

The lawn should be smooth and flat slightly slop 6" to 12" in 100 feet so that water can run of in the root area.

SEEDING A PREPARED LAWN BED:-

Although lawn seed may be sown in any month but autumn and spring are the best time. If seeds are swoon in autumn they germinate being low temperature, however in spring is also the optimum season.

Broadcast the seeds in smooth lawn while the area is quite it shall be done by hand or with a mechanical seeder. After the seed is broadcast, rake it in lightly. From likely brush up with the sulphate. After brushing some more seed may be spreaded so that there should be no patches.

After that sprinkling water gently so that rooler may be done. For initial watering, use the adequate length of plastic pipe to get all the way round the lawn without dragging across.

When days are warn and windy water 2 or 3 times by sprinkling water should be done for good moisture till the grass is grown. To avoid a wash out seeds of grass water sprinkling be done lightly.

After growing the seeds the grass when one up 1" to 1½" mowed the lawn.

The following disadvantages are however found in growing lawns through seeds.

i) Reliable seed is not generally available.
ii) It is very likely to be taken away by aunts and birds and heavy care is to be exercised.

SEEDING ON A SLOPE:-

Before sowing seed on slope beds should be prepared 3' to 4' apart. When the grass grows after the bed should be removed for smooth lawn.

SODDING A PREPARED LAWN BED:-

Un roll the sod on prepared soil, lay the strips parallel with the strip ends staggered as in the brick-layers running bond pattern. Press each successively laid strip snugly up against the one next to it.

After the sod strips are all laid in this fashion roll the sod with a roller haled full of water to smooth out sough spots and bond the sod with the soil.

Now water a little more carefully than usual for a few days till the grass is set.

This method has been found expensive in our country.

SPRIGGING OR PLANTING GRASS ROOTS:-

This consists of tearing apart clumps of the grass stems to get pieces an inch or two long, each carrying a few tufts of leaves.

LAWN WATERING

SOIL CAPACITY:-

Each soil type has its own water holding capacity, which is as under:-

i) IN SAND 60 GAL 1" deep irrigation.
ii) IN LOAM 90 GAL 1½" irrigation.
iii) IN CLAY 160 GAL 2 ½" irrigation.

RATES OF WATER LOSS:-

The average water loss in mid summer areas is about 1" inch of water each week. In the hot localities, especially when a dry wind is blowing, the weekly loss increase to 2" inches and more in a week.

HOW DEEP GOES THE WATER:-

In dry soil one inch of water will penetrate as follows:-

i) SAND -- 12".
ii) LOAM -- 6" -- 10".
iii) CLAY -- 4" -- 5".

Water does not move down through soil until each soil particles has its find of water. After each particle has its quota, the additional water is free to move on to the next particle.

How deep one inch of water will penetrate depends on the moisture in the soil when water is applied.

For example, an open field with a clay soil that was completely dried out by the time of a rain had to receive 10" inches of rain before it become wet to a depth of 3 feet.

But an added inch of water would penetrate 3 feet and more if the first were saturated

INTERVALS FOR WATERING OF LAWN:-

Alternate watering and partial drying out soil, encourage healthier plant growth and deeper rooting in hot summer areas.

Normally the soils would need more than 1" deep irrigation every week depending upon the penetration, aeration and the wilting sufficient of soil. Deep watering once a week shall be preferable which is however practicable only in canal irrigated areas. In other areas light irrigation is restored every 2nd or 3rd day or dayly sprinkling.

LAWN MOWING & GROOMING

GENERAL: -

Different grasses require different un keep. There are three principal choices in lawn mowing machinery:

i) Scissors – cut – Hand Reel.
ii) Scissors – cut – Gasoline Reel.
iii) Knife – cut lawn does not look as neat as real-cut lawns.

GENERAL: -

Grass has continual need for nitrogen. If a lawn turns yellow or pale green and if the grass get thin and weeds come in, it gives an indication that nitrogen is needed. If fertilizer containing nitrogen is one form or another is applied but the lawn still does not improve then other troubles could be some disease, lack of soil-air, grubs larvae.

FERTILIZER SOIL / ENRICHERS AND TONICS

HORSE:-

Helps break up clay heavy soil used in light soil dig in during early spring.
(Two barrow loads per sq. rod - 30¼ sq. yd)

COW:-

Helps retain moisture in light sandy soil dig in during late winter early spring. (Two barrow leads per sq. rod - 30¼ sq. yd)

Apply horse, cow dung also in liquid form to growing plants ½ peck manure to 18 Gal. water. Dilute with equal volume of clear water before use.

RABBIT GOAT:-

Dig in during winter, Goat and Sheep also in liquid 1 Lb per sq. yard from ¼ peck to 18 Gal. dilute as above.

FOWL PIGEON:-

Mix with equal bulk of soil as collected powder it when dry hoe of fork in around growing plants, spring and summer.

Heaped trowelful per yard run of fow.

Use also in liquid form, spring and summer ¼peck to 18 Gal. water dilute with equal volume clear water before use.

DECAYED VEGETABLE MATTER:-

Leaves, weeds, grass, discease free green stuff generally collected in heap to rot down supplies humus helps to retain moisture

Burry not less than 9 in deep.

SEAWEED:-

Provides humus, potach. All crops may be dug in Either wet or dry, in winter.

Dig in generously and deeply.

GREEN MANURE:-

Adds humus: helps retain moisture in light, sandy soil. Sow mixture of vetches and rye, thickly in September or sow mustard and rape mixture in summer

Dig in top growth the following spring

Dig in top growth late autumn

DRIED BLOOD SUPHATE OF AMMONIA:-

These provide nitrogen for encouragement of leas stem, fast growth. Use at intervals spring and summer; how in.

A sprinkling 1 per sq. yard sham pinch per plant.

Also in liquid form: sulphate of ammonia 1 oz per Gal. nitrate of soda

QUICK LIME (CALCIUM OXIDE):-

Clay heavy soils, slake on ground fork into surface.

GROUND LIME:-

This powdered. Use similarly. ½ lb. per sq. yd

HYDRATED LIME (CALCIUM HYDROXIDE):-

This is water slaked quicklime, in power form and non caustic. Sold in small bags with directions for use. Suitable for heavy and medium soils.

GROUND LIMESTONE (CARBONATE OF LIME):-

Powered chalk. For light or sandy soil. 1 lb. per sq. yd.

Specifications of trees / shrubs:-

1. Trees pits should be excavated 3' x 3' x 3' and should be refilled with one part of imported loam soil ½ part sand and ½ part manure.

2. Shrub pits should be excavated 2' x 2' x 2' and above mixture should be applied for refilling.

3. Hedge drain should be excavated 2' width 1 foot in depth and should be above mixture should be applied for re-filling.

PAKISTAN PUBLIC WORKS DEPARTMENT

HORTICULTURE

SUB-HEAD CODE 126

S. No.	Description	Unit	Rate in Rs.
1	Rough dressing of the area for lawn including picking stones, pebbles, stubble, grass roots and other injurious matters and breaking of clods complete including disposal of rubbish within 3 chains (92 m).	100 Sq.ft.	325.00
		Sq.m.	34.98
2	Supplying and stacking well decayed cowdung manure from approved source including all leads and lifts.	100 Cft.	6,278.13
		Cu.m.	2,217.10
3	Spreading cowdung manure and mixing the same upto any depth in the prepared bed including breaking clods, dressing fine for grassing, including, disposal of rubbish within 3 chains (92 m) complete .	100 Cft.	343.75
		Cu.m.	121.39
4	Supplying and stacking well decayed sewage manure from approved sources including all leads and lifts .	100 Cft.	12,528.13
		Cu.m.	4,424.27
5	Spreading sewage manure in uniform thickness in the prepared bed including mixing with original soil upto any depth including breaking clods and dressing fine for grassing as directed by the Engineer-in-charge including disposal of rubbish within 3 chains (92 m) complete.	100 Cft.	315.63
		Cu.m.	111.46
6	Supplying and stacking approved garden soil (sweet earth) free from salts, pebbles and grass roots etc. including all leads and lifts.	100 Cft.	3,456.25
		Cu.m.	1,220.56
7	Spreading approved garden soil (sweet earth) in uniform thickness including mixing and breaking clods and dressing fine for grassing including disposal of rubbish within 3 chains (92 m) complete .	100 Cft.	296.88
		Cu.m.	104.84
8	Supply and stacking approved quality sand free from salts, pebbles, grass roots etc. including all leads and lift.	100 Cft.	4,056.25
		Cu.m.	1,432.45
9	Spreading approved quality sand in uniform thickness and mixing the same, breaking clods and dressing fine for grassing including disposal of rubbish within 3 chains (92 m) complete .	100 Cft.	593.75
		Cu.m.	209.68
10	Dressing fine upto a depth of 4" (102 mm) and preparing the bed for final finishing including sprinkling water raking and roiling complete.	100 Sq.ft.	612.50
		Sq.m.	65.93
11	Supply live (Dacca) grass in slabs with earth intact including all lead and lifts.	Sq.ft.	34.38
		Sq.m.	370.01
12	Supplying live (local) grass in slabs with earth intact including all lead and lifts.	Sq.ft.	28.13
		Sq.m.	302.73
13	Grassing fine by dribbling grass roots 3" apart including watering, weeding till such time the grass is set and becomes green and is fit for mowing	100 Sq.ft.	755.00
		Sq.m.	81.27

HORTICULTURE
SUB-HEAD CODE 126

S. No.	Description	Unit	Rate in Rs.
14	Supplying stone boulders of approved size and shape including all leads and lifts.	100 Cft. Cu.m.	6,253.77 2,208.50
15	Providing and fixing 4 seated white or coloured light shade marble mosaic benches (5-1/2 ft. x 1-1/2 ft. x 1-3/4 ft.) (1676 mm x 533 mm x 457 mm) without back of approved design and drawing in white cement including cartage, loading and unloading etc. complete .	Each Each	18,825.00 18,825.00
16	Providing and fixing perforated standard bitumen drums (for tree guards) of approved design including painting in black and white including cartage, loading and unloading etc. complete .	Each Each	2,626.50 2,626.50
17	Providing and fixing RCC tree guards 4 ft. x 2-1/2 ft. x 2-1/2 ft. (1219 mm x 762 mm x 762 mm) clear size as per approved design and drawing including the cost of reinforcement and white wash 3 coats complete.	Each Each	3,956.62 3,956.62
18	Providing and fixing CC solid Block masonry 6" (152 mm) thick honey-combed in tree guards of required size and shape set in 1:6 cement mortar including curing etc. as per approved design and drawing etc. including white washing 3 coats complete .	Each Each	7,309.74 7,309.74
19	Providing and fixing 2nd class burnt brick 4-1/2" (114mm) thick masonry honey-combed in tree guards of required size and shape set in 1:6 cement mortar including curing as per approved design and drawing etc. complete.	Each Each	3,589.66 3,589.66
20	Supplying and fixing 4 ft. x 2-1/2 ft. x 2-1/2 ft. (1219 mm x 762 mm x 762 mm) clear size in approved design and drawing, angle iron 1-1/2" x 1-1/2" x 1/4" (38 mm x 38 mm x 6.4 mm) and barbed wire in tree guard of required size and shape as per direction of the Engineer-in-Charge ..	Each Each	7,327.81 7,327.81
21	Providing and fixing in approved design and drawing, pan wood posts in tree guards of required size and shape as per direction of the Engineer-in-charge .	Cft. Cu.m.	4,720.65 166,708.22
22	Providing and fixing in approved design and drawing, barbed wire in tree guards of required size and shape as per direction of the Engineer-in-charge .	Cwt. kg.	21,373.67 420.60
23	Providing and fixing swing bridge type as per approved drawing .	Each Each	14,400.00 14,400.00
24	Providing and fixing shisham slide outfit covered with G.I. sheet as per approved drawing.	Each Each	6,600.00 6,600.00
25	Providing and fixing see saw as per approved drawing.	Each Each	7,800.00 7,800.00
26	Providing and fixing merry-go-round centre pipe 4" (100 mm) angle iron and wooden plank covered with M.S. sheets etc., as per approved drawing.	Each Each	22,500.00 22,500.00

ROADS AND RUNWAYS

Code 127

ROAD AND RUN WAY (S.H.-127)

Brief Specification

(1) Solid Measure:

Materials in their natural state before excavation etc.

(2) Packed Measure

Materials which have been spread, leveled and / or filled, watered and rammed or equally consolidated.

(3) Loose Measure:

As packed measure but not rammed or equally consolidated.

(4) Borrow Pits:

Are to be made only in the areas and of the size and shape approved by the Engineer in charge.

(5) Profiles:

All excavations, embankments, revetments etc are to be properly set out to the true line curre, level or slopes required.

(6) Embankments:

Earth for formation of embankment shall be taken from cut material, in preference to take it from borrow pits. The height is to be based on the average lift from the average ground level for the embankment. The depth of the borrow pits is not to be included in calculating the lift.

(7) Compaction:

Compaction where ever specified will be according to modified AASHTO density as follow:-

(i) Non Cohesive soil upto 100% of modified AASHTO density.

(ii) Cohesive soil upto 95% of modified AASHTO density.

Note: Decision with reference to cohesive, non cohesive soil will be made by Engineer-in-charge through site inspection and tests where necessary. The type of equipment to be used for compaction at various Sub-grades shall be determined by the field staff as a result of field tests. Prior to and during the entire operation of compaction soil tests shall be carried out both in the field and the laboratory. The contractor shall bound to make corrections where found necessary as a result of the tests.

(8) Final Checking of Sub-grade:

After compaction the surface shall be checked by means of a scratch template. The template should be designed as to enable check of sub-grade after placing forms on which the template handles can slide smoothly and should be of such strength and the rigidity that under a test made by supporting it at the centre, the ends will not show a deflection of more than one inch / 25 mm.

The template should be provided with adjusting rods projecting downwards towards the Sub-grade at a spacing of not more than one foot / 300 mm.

The longitudinal and cross-section should also be checked by means of line and grade stakes.

After the final checking the sub-grade must be protected till the sub-base is laid.

Only pneumatic wheel traffic should be allowed on the compacted sub-grade, crawler wheel or steel tyred traffic must not be allowed.

(9) SUB-BASE COURSE

(i) Prior to place sub-base materials, the sub-grade in the area to be covered should be set right with adequate compaction.

(ii) Any error in the sub-grade should be corrected & by adding material, loosening and compacting or cutting off peaks etc.

(iii) The entire surface of sub-grade should be cleaned of all foreign matter by brooming.

(iv) The contractor will produce sample from various sources to be tested for gradation, Atterberg limits, and AASHO density,

(v) Material for the sub base should be free from lumps or balls of clay organic or other objectionable matter.

(vi) The portion of the selected material passing No.40 shall have a liquid limit less than 35 and plastic index less them 12 The loose thickness of material should be such that the compacted depth is not less than 3 inches / 75m.m and not more than 6 inch/ 150 m.m.

(vii) Actual loose depth of material will perhaps be 20% to 25% more than the compacted depth.

(viii) The moisture contents of the material should be checked and corrected.

(ix) The moisture contracts slightly, in excess of the optimum will be necessary for obtaining the desired density.

(x) The contractor shall however, be required to increase or reduce the moisture contents at the desire of Engineer-in-charge, after the test in Laboratory in the following manner.

(a) When the field moisture contents exceed the specified percentage, these should be reduced by blading and aeration. The use of disc followed by blade will accelerate drying. The process should be continued till uniformity of moisture content is obtained through out the mass.

If the field moisture contents are in-sufficient, moisture should be added to the material as it is being moved into the windows by water truck which should follow immediately behind the blade. The addition of water also prevents segregation. As soon as windrowing is completed, the contractor should arrange to get it inspected by the field staff to determine the uniformity of moisture contents before compaction is started.

(xi) During the entire operation of laying and compaction of the sub-base course, the following tests shall be carried out both in the field and Laboratory and the contractor shall be bound to make correction where found necessary.

(a) Moisture tests:

Moisture contents shall be regularly checked by the quick field method and in speedy moisture tester by the field staff and the samples also sent frequently to the Laboratory for testing.

(b) Grading Tests:

Mechanical analysis test will be carried out frequently to know any major change in the grading of the material necessitating change in the moisture contents, compaction equipment or the necessity of rejecting the material brought at site.

(c) Field Density test:

The field density of the compacted sub-base course shall be frequently tested at the rate not less than one per 2400 Sft/ 223 Sqm area or predetermined location. At random tests shall also be carried twice a day.

(xiii) Soil aggregates (Ghera) available as such in nature consists of pebbles, shingle and sand. The size of pebbles should not exceed 75 mm. It can be a mixture of natural and crushed stone if approved by Engineer in charge. The minimum CBR for sub base material shall be 30%.

(10) Base Course (Water Bound Macadam)

(1) Use approved suitable hard, tough and durable stone.

(2) Road metal to be graded, produced from broken or crushed quarried stone or large boulders of the least dimension not less than 6 inches / 150 mm.

(3) Lay to gradient camber and super-elevation required and dry roll, fill in depression, which may appear during rolling.

(4) Roll wet and add screenings ½ inch / 13 m.m or below and roll on, leaving the finished surface solid smooth and conforming to the required falls, levels, etc.

(5) Cover surface with ½ inch / 13 mm layer of approved grit (river sand gravel, or shingle or stone screenings) and open road to traffic.

(6) Keep the road wet / moist under traffic for 14 days and make good damages.

(7) Roller to be 8 to 12 ton power roller.

(8) When AASHTO specifications are required to be followed, in sub base and base, the material used shall be of the quality and grading conforming to standard AASHTO grading / specifications. The recommended gradation for sub-base and base is given in table 1 and table II respectively.

GRADING FOR SOIL AGGREGATES USED AS SUB BASE MATERIAL

Sieve Designation	Percentage by weight passing square mesh sieve	
	Grading "A"	Grading "B"
2 in (50mm)	100	100
1 in (25mm)	-	75-95
3/8 in (9.5mm)	30-65	40-75
No.4(4-75 mm)	25-55	30-60
No.10(2.00mm)	15-40	20-45
No.40(0.425mm)	8-20	15-30
No.200(0.075mm)	2-8	5-20

Note:- (1) The lab soaked CBR should not be les than 30%.

(2) The material passing No.40 shall have liquid limit not greater than 25 and plastic index (P1) not greater than 6.

GRADING REQUIREMENT FOR CRUSHEDED STONE 'BASE COURSE'

Sieve Designation	Percentage by weight passing square mesh sieve			
	Grading 'A' Size 50mm To 25mm (2in to 1 in)	Grading 'B' size 63 mm to 37.5 mm (2/1-2 into 1/1-2 in)	Grading 'C' Size 90mm To 37.5 mm (3/1-2 into 1/1-2)	Screening size 4.75mm to 0.15 mm (No.4 to No.100)
Passing 100 mm (4in) sieve	-	-	100	-
Passing 90 mm (3 ½ in) Sieve	-	-	90-100	-
passing 75 mm (3 in) Sieve	-	100	-	-
passing 63 mm (2 ½ in) sieve	100	90-100	25-60	-
passing 50mm (2 in) Sieve	90-100	35-70	-	-
passing 37.50 mm (1½ in) Sieve	37-50	0-15	0-15	-
passing 25 mm	0-15	-	-	-

(I in) Sieve				
passing 19mm (3/4 in) Sieve	-	0-5	0-5	-
passing 12.50 mm (½ in) Sieve	0-5	-	-	-
passing 9.50 mm (3/8 in) Sieve	-	-	-	100
passing 4.75 mm (No.4) Sieve	-	-	-	85-100
passing 0.15 mm (No.100) Sieve.	-	-	-	10-30

Note:- (1) The maximum size of largest stone particle in selected gradation of material should be less than ½ of the thickness of compacted layer.

(2) Percentage of wear not greater than 45 at 500 revolution as per AASHTO-T96.

(10) The material as specified will be laid to the required profile and camber and hand packed. The surface will be then rolled by plain roller followed by vibratory roller. Choking material will continue tobe added while being rolled with vibratory roller, till saturation of the voids is achieved. Water will then be added and surface rolled with plain roller till well finished compacted surface is attained. Dry density of the base/sub base will be determined by field method and process of rolling further continued till a dry density to the extent of required modified AASHTO is achieved.

(11) PRIMING COAT:

(1) The prime coat will be applied only when the existing surface is dry or contain only such amount of moisture as will not hamper uniform distribution of the bituminous material.

(2) No work is done when the atmospheric temperature is below 60 F or when the weather is foggy or rainy.

(3) The various limits of the quantity of bitumen varying between 0.2 to 0.8 gallon per Sq yard / 0.84 Sqm to be used after making trail patches or 10kg / 10 Sqm/108 Sft on base course.

(4) One should be very careful to ensure uniformity of application, prevention of leak drops etc, other wise the entire priming work will be rejected.

(12) SURFACE DRESSING (Single Coat 80/100 Grade Bitumen)

(a) Allow the water bound macadam base course surface to dry to a depth of at least 2inch/50mm.

(b) Rack all caked mud, dust dirt or other deleterious matter with wire brushes and brooms and finally dust the surface with gunny bags so as to leave the voids perfectly clean.

(c) Apply tack/prime coat of bitumen 60/70 or 80/100 heated to 150C.

Spray hot dressing at the rate of 12.20 kg per 10 Sqm. The hot dressing shall be heated in a proper heating plant to the temperature ranging between the minimum and Maximum

(a) temperature specified by the manufacturer and shall be applied to the road surface by means of pressure sprayer at temperature not less than the minimum temperature specified. The sprayer shall be operated in such a way as shall ensure an even and uniform distribution of the hot dressing on the road surface. Excessive deposit of hot dressing on the road shall not be allowed. Spraying shall in all cases be carried out parallel to the centre line of the road. The edges of the surface tobe treated with hot dressing shall be defined by wire, binder twine or other cord lines stretched and pegged in position.

(b) Immediately following the application of hot dressing spread ¼ inch /6 mm gauge aggregate consisting of broken or crushed stone or gravel or shingle The aggregate shall be perfectly dry, free from foreign matter and shall be spread uniformly and evenly at the rate of 0.12cum /10 Sqm. of the bituminous surface. Precaution shall be taken to ensure that whole of the surface is covered with uniform layer of aggregate with out any of accumulation of surplus aggregate at any point. The aggregate to use shall preferably by gravel.

(c) Immediately following the application of the aggregate and the complection of brooming, roll the whole area with appropriate compaction equipment/roller. The rolling shall continue till the aggregate is thoroughly embedded in the bituminous surface.

(d) Open the road to traffic soon after the completion of rolling unless otherwise specified by the manufacturer of the hot dressing used.

(13) SURFACE DRESSING TWO COAT (80/100 bitumen)

Two coat work as on water bound macadam surface not previously treated with hot or cold dressing.

First Coat:

All as single coat work described in para 12(c) to 12 (g) except that.

(i) Spray hot dressing at a rate of 22 kg / 10 Sqm / 108 Sft.

(ii) Spread ½ inch / 13 mm gauge aggregate (graded screened bajri/ crushed stone) at a rate of 6.35 Cft/0.18 cum per 108Sft/ 10 Sqm

Second coat:

This shall be applied immediately after the first coat. The work shall be done in all respect as described in para 12 (c) to 12 (g) above except that (i) Spray hot dressing at the rate of 12.20kg/108 Sft / 10 Sqm. (ii) Spread ¼ inch/ 6 mm gauge aggregate at the rate of 5.3 Cft / 0.15 cum per 108 Sft/ 10 Sqm.

(14) RENEWAL COAT WITH BITUMEN 80/100 ON BLACK TOP SURFACE

i) All pots holes shall be cut as nearly square or rectangular as possible, the sides being cut vertical.

ii) The side of the trench should be painted with "Hot Bitumen" and filled with metal previously coated with hot bitumen.

iii) The pre-coated metal should be rammed in layers of one inch 725 mm.

iv) After repairs to a patch it shall be slightly dusted with sand or stone dust before opening it to traffic so that the coated material may not be pricked up by traffic.

v) Patch repairs to pot holes should proceed very much in advance of seal coat work.

vi) The old surface should then be thoroughly cleaned of dust mud etc with wire brushes and brooms and finally swept with gunny bags. The surface should be perfectly dry.

vii) All as paras 12 (c) to 12 (g) above, except that:

viii) Spray hot dressing at rate of 12.20 kg / 108 sft / 10 sqm.

(15) PRE-MIXED 3" INCHES / 75 MM ASPHALT MACADAM

i) The base coat and seal coat shall have the thickness of 2-1/2 inches / 63 mm and 1/2 inch / 13 mm respectively.

ii) The aggregates used shall be clean dry and hard obtained from approved quarries and shall consist of the following sizes and quantities.

a) BASE COAT;-

i) 1-1/2 inch / 38 mm standard size @ 22 cft / 0.62 cum per 100 sft / 9.3 cum one inch / 25 mm standard size @ 8 cft / 0.23 cum per 100 sft / 9.3 cum.

b. Pre-Coated Seal:-

ii) 1/4 inch / 6 mm standard size @ 8 cft / 0.23 cum per 100 sft / 9.3 cum.

iii) The bitumen shall be heated at per manufacturer's specifications and shall be maintained at that temperature.

iv) The aggregate shall be measured and fed into mixer in the correct proportions. The quantity of bitumen will be 3-1/2 lbs per cft. of the aggregates.

v) A small quantity of the fine river sand may be added to the mix as a filler at 4 Ibs / 1.8 kg per cft / 0.0283 cum of the aggregates.

vi) The mixed material shall be conveyed by suitable means to the road surface and shall be raked to the correct thickness.

vii) The surface shall be rolled with 8 to 10 ton power roller and the rolling should continue as long as proper consolidation is obtained.

viii) The wheels of the roller should be kept moistened so as to prevent the wheels from picking up the coated material.

ix) The base course and the seal coat shall be rolled separately.

x) The surface should be tested by a camber board and straight edge for depressions which should be filled in with more mix and well rolled.

(16) PREMIXED 2"INCHES/50 MM ASPHALT MACADAM

i) The base coat and pre-coated seal coat shall have the thickness of 1-1/2 inch / 38 mm and 1/2 inch / 13 mm respectively

ii) The aggregates shall be clean dry, hard and of the best quality consist of the following size and quantity

a) **BASE COAT:-**

1 inch / 25 mm standard size @ 15 cft / 0.42 cum per 100 sft / 9.3 cum. 3/4 inch / 19 mm standard size @ 5 cft / 0.14 cum per 100 sft / 9.3 cum.

b) **SEAL COAT;-**

i) 1/4 inch / 6 mm standard size @ 6 cft / 0.17 cum per 100 sft / 9.3 cum.

ii) The aggregate shall be measured and fed into mixture in the correct proportions. The quantity of bitumen shall be 3-1/2 Ibs / 1.58 kg per cft/o.02832 cum of the aggregates.

iii) A small quantity of fine river sand may be added to the mix as filler at 4 Ibs / 1.8 kg per cft / 0.02832 cum of the aggregates.

iv) Pre-coated seal coat consist of 1/4 inch / 6 mm standard size stone chips or bajri as specified, pre-coated with bitumen of the grade specified, the bitumen required to coat the chips or screened bajri shall be 4 Ibs / 1.8 kg per cft / 0.02832 cum of chips or bajri. The mix will be laid at 6 cft / 0.17 cum per 100 sft / 9.3 cum

(17) PRE-MIXES 1 INCH /25 MM AS ASPHALT MACADAM (CHIPPING CARPET)

i) The surface on which the carpet is to be laid should thoroughly cleaned of all dirt and dust etc.

ii) Apply tack coat of hot bitumen of specified grade and temperature @ 15 Ibs / 6.8 kg per 100 sft / 9.3 cum.

iii) A layer of pre-mixed chips or bajri 1/2 inch / 13 mm standard size coated with hot bitumen of specified grade and temperature @ 4 Ibs / 1.8 kg per cft shall be spread uniformly over the tack coat at 10 cft per 100 sft.

iv) The surface should then rolled with a power roller of 8-tons to 10-tons to full consolidation.

v) The surface should then be given a seal of pre-mixed sand at 2-1/2 cft / 0.07 cum per 100 sft / 9.3 cum. The sand of approved quality shall be mixed with bitumen at specified temperature at 8 Ibs / 3.6 kg per cft / 0.0283 cum of sand and carefully spread over pre-mixed bajri so as to fill the voids.

vi) Keep the traffic off the finished surface for 24 hours.

Note: For more details regarding Grouted Macadam: Full Grout 3" inches /75 mm, 2" inches / 50 mm with 30/40 bitumen. Grouted Macadam, Semi Grout with 30/40 grade, a seal coat with 80/100 grade bitumen and Hot Mix Asphalt Concrete Pavements, please consult specifications for Building and Road Works, Pakistan Public Works Department.

(18) CEMENT CONCRETE PAVEMENT

a) Cement:-

The cement shall be ordinary Portland, normal setting cement of any brand, complying in all respect with B.S. 12.

Cement unless otherwise specified to be of any particular quality, shall means ordinary setting time.

b) Coarse Aggregate:-

Aggregate must be clean, inert, hard, nonporous and free from dust, laminated particles, loam clay, organic or other impurities and silt. Coarse aggregates shall be hard and durable / broken / crushed stone, gravel or single.

c) **Sand:-**

Sand shall be sharp, cubical, hard, dense and whole of which pass through 3/16 inches / 5 mm sieve and 2 to 10% through sieve No.ioo. It should be free organic impurities and clay lumps.

d) **Water:-**

Water shall be free from earth, vegetable, organic and inorganic impurities particularly the sulphate / salts. Water should generally be fit for drinking P.H. value of water shall range between 6 and 8.

e) **Cement Concrete:-**

i) No mixer shall be used which has rated capacity of less than one bag batch.
ii) The water measuring equipment shall be capable of accurate measurement, by volume and by weight.
iii) Vibrates shall be placed at such places so as to ensure thorough vibration of the concrete at all parts. Vibrations shall not be secured to the reinforcement. At least, one stand-by-vibrator shall be held ready for immediate use in the event of breakdown.
iv) The concrete shall be mixed in such quantity as is required for immediate use and any concrete which has developed initial set shall not be used.
v) Concrete not in place within 45 minutes after the introduction of the mixing water to the cement, shall not be used.
vi) Hand mixing shall not be done except in case of emergency and under written approval of Engineer-In-Charge.
vii) The base on which the concrete pavement is laid shall have been prepared smooth, compacted and true to the grades and cross-sections.
viii) Forms shall be made of steel of an approved section and shall beset to the required lines and grades. Forms shall be thoroughly cleaned and oiled each time they are used.
ix) The slump of the pavement concrete shall be from one to 3 inches: The slump shall not be varying more than one inch form batch to batch.
x) All joints shall be constructed true to alignment and grade. Form expansion joints between the slabs to the full depth of concrete. The expansion joints shall be 1/2 inch / 13 mm.
xi) The concrete shall be spread uniformly between the forms. Vibrators shall be used adjacent to the longitudinal edge of the pavement. The rate of vibration shall not be less than 3500 vibrations per minutes.
xii) The concrete shall be spread full depth and compacted so that the surface will conform to the finished grade and cross-sections. The concrete along the forms shall be thoroughly spaded or vibrated in a manner that will ensure maximum compaction.
xiii) Immediately following final floating, the entire area of the pavement shall be tested with a 10 feet straight edge. Any depression found shall be immediately filled with fresh concrete which shall than be compacted and finished.

xiv) Placing of concrete should be discontinued during the heavy rain which causes serious damage to the finished surface.

xv) Curing shall be started immediately after 24 hours when the concrete is still green but in summer and in the presence of hot dry winds curing may be required to be started earlier depending upon the condition. Curing shall not be delayed as once concrete gets dry it will affect adversely toward completion of chemical action. For normal Portland cement, under normal temperature conditions, a seen days curing in summer is satisfactory.

PAKISTAN PUBLIC WORKS DEPARTMENT

ROADS AND RUNWAYS
SUB-HEAD CODE 127

S. No.	Description	Unit	Rate in Rs.
	Earth Work.		
1	Excavation or cutting in all kinds of soil (except gravelly, murum, wet silt, clay or mud and rock) to a required grade, camber and side slopes including dressing top and sides and disposal of excavated stuff within a lift of 5 ft. (1.52 m) and lead upto 100 ft. (30.5 m).	100 Cft. Cu.m.	1,336.44 471.96
2	Excavation or cutting wet silt, clay or mud to a required grade, camber and side slopes including dressing top and sides and disposal of excavated stuff within a lift of 5 ft. (1.52 m) and lead upto 100 ft. (30.5 m).	100 Cft. Cu.m.	1,959.88 692.12
3	Excavation or cutting in gravelly soil to a required grade, camber and side slopes including dressing top and disposal of excavated stuff within a lift of 5 ft. (1.52 m) and lead upto 100 ft. (30.5 m) .	100 Cft. Cu.m.	1,573.94 555.83
4	Excavation or cutting in murum soil to a required grade, camber and side slopes including dressing top and sides and disposal of excavated stuff within a lift of 5 ft. (1.52 m) and lead upto 100 ft. (30.5 m) .	100 Cft. Cu.m.	1,692.69 597.77
5	Excavation or cutting in soft rock by hammering, chiselling and pick and jumper work including sorting and stacking the excavated stuff complete within a lift of 5 ft. (1.52 m) and lead upto 100 ft. (30.5 m).	100 Cft. Cu.m.	4,316.13 1,524.23
6	Excavation or cutting in soft rock by blasting including sorting and stacking the excavated stuff complete within a lift of 5 ft. (1.52 m) and lead upto 100 ft. (30.5 m)..	100 Cft. Cu.m.	2,034.35 718.42
7	Excavation or cutting in hard rock by blasting including sorting and stacking the excavated stuff complete within a lift of 5 ft. (1.52 m) and lead upto 100 ft. (30.5 m) .	100 Cft. Cu.m.	4,075.83 1,439.37
8	Excavation or cutting in hard rock by hammering and chiselling including sorting and stacking the excavated stuff complete within a lift of 5 ft. (1.52 m) and lead upto 100 ft. (30.5 m) .	100 Cft. Cu.m.	5,380.19 1,900.00
9	Extra if excavated earth is required to be filled in road embankment by placing it in layers not exceeding 9" (229 mm) in depth as per approved section including dressing top and sides of the bank on item 1 to 4	100 Cft. Cu.m.	623.64 220.24
10	Making earthen embankments with earth taken from approved borrow pits including cost of excavation, placing earth in layers not exceeding 9" (229 m) depth as per approved section including dressing top and sides of the bank within a lift of 5 ft. (1.52m) and lead upto 100ft. (30.5 m) in all kinds of soil (except gravelly, murum, wet silt, clay or mud and rock).	100 Cft. Cu.m.	1,811.44 639.70

S. No.	Description	Unit	Rate in Rs.
11	Making earthen embankments with earth taken from approved borrow pits including cost of excavation, in wet silt, clay or mud, placing earth in layers not exceeding 9" (229 m) in depth as per approved section including dressing top and sides of the bank within a lift of 5 ft. (1.52 m) and lead upto 100ft. (30.5 m).	100 Cft. Cu.m.	2,286.44 807.45
12	Making earthen embankments with earth taken from approved borrow pits including cost of excavation, in gravelly soil, placing earth in layers not exceeding 9" (229 mm) in depth as per approved section including dressing top and sides of the bank within a lift of 5 ft. (1.52 m) and lead upto 100 ft. (30.5 m) .	100 Cft. Cu.m.	2,048.94 723.58
13	Making earthen embankments with earth taken from approved borrow pits including cost of excavation, in murum soil, placing earth in layers not exceeding 9" (229 mm) depth as per approved section including dressing top and sides of the bank within a lift of 5 ft. (1.52 m) and lead upto 100 ft. (30.5 m) .	100 Cft. Cu.m.	2,167.69 765.51
14	Extra for every 100 ft. (30.5 m) lead beyond first 100 ft. (30.5 m) and upto 500 ft (153 m) on items 1 to 4 and 10..	100 Cft. Cu.m.	237.50 83.87
15	Extra for every 100 ft. (30.5 m) lead beyond first 100 ft. (30.5 m) and upto 500 ft (153 m) on items 5 to 8 ..	100 Cft. Cu.m.	296.88 104.84
16	Extra for lift beyond 5 ft. (1.52 m) and upto 10 ft. (3.05 m) on items 1 to 4 and 10.	100 Cft. Cu.m.	475.00 167.74
17	Extra for lift beyond 5 ft. (1.52 m) and upto-10 ft. (3.05 m) on items 5 to 8 .	100 Cft. Cu.m.	593.75 209.68
18	Compaction of earthen embankments to full depth and width below sub-grade level by approved mechanical means in layers not exceeding 9" (229 mm) in depth at optimum moisture content including watering, mixing by mechanical means complete (the sub-grade embankment of 3 Ft. (914 mm) or less in height shall be compacted to at least 95% modified A.A.S.H.O. max. dry density or their full depth and width, embankments over 3 ft. (914 mm) in depth shall have top 3 ft. (914 mm) compacted to not less than 95% modified A.A.S.H.O. maximum dry density to their full depth and width and portion below 3 ft. (914 mm) compacted not less than 85% modified A.A.S.H.O. max. dry density to their full depth and width) .	100 Cft. Cu.m.	2,033.34 718.07
	Sub-grade Preparation.		
19	Preparation of sub-grade over top of embankment already compacted to at least 95% modified A.A.S.H.O. maximum dry density with required dressing including cutting to required grade, camber and side slopes and disposal of surplus earth within three chains lead (92 m) complete.	100 Sq.ft. Sq.m.	871.88 93.85

S. No.	Description	Unit	Rate in Rs.
20	Preparation of sub-grade over bottom of excavation with required dressing to required grade, camber and side slopes including cutting to required depth and breaking clods watering and consolidation with suitable mechanical means to attain minimum density of 95% modified A.A.S.H.O. maximum dry density for top 6" (152mm) layers including disposal of surplus earth within 3 chains (92 m) lead complete .	100 Sq.ft. Sq.m.	1,483.75 159.71
	Soling, Sub-base and Base		
21	Supplying and laying for sub-base, soling coat, 9" (229mm) gauge stone boulders to required grade and camber including packing with spawls,chips and consolidating with power roller with 10 miles lead and all lift.	100 Cft. Cu.m.	8,183.46 2,889.96
22	Supplying and laying for sub-base, soling coat, 6" (150 mm) gauge stone boulders to required grade and camber including packing with spawls,chips and consolidating with power roller with 10 miles lead and all lift.	100 Cft. Cu.m.	8,202.90 2,896.83
23	Supplying and laying for sub-base, soling coat, 4" to 3" (102mm to 76 mm) gauge stone boulders to required grade and camber including packing with spawls,chips and consolidating with power roller with 10 miles lead and all lift.	100 Cft. Cu.m.	8,577.90 3,029.26
24	Supplying and stacking burnt bricks of approved quality and size for sub-base or soling coat etc. including all lead and lift.	100 Nos. 100 Nos.	1,618.95 1,618.95
25	Supplying and laying vitrified brick ballast 2" to 1-1/2" (51 mm to 38 mm) gauge of approved quality for base or wearing coat etc., in Layers not exceeding 6" (152 mm) thick, consolidating by approved mechanical means to required grade and camber including watering etc., with all lead and lift complete.	100 Cft. Cu.m.	8,870.75 3,132.68
26	Supplying and laying hand broken 3" to 3/4" (76 mm to 19 mm) stone ballast of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with 10 miles lead and all lift complete (actual compacted depth shall be considered for payment)	100 Cft. Cu.m.	7,544.65 2,664.37
27	Supplying and laying machine crushed 3" to 3/4" (76 mm to 19 mm) stone ballast of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with 10 miles lead and all lift complete (actual compacted depth shall be considered for payment)	100 Cft. Cu.m.	7,919.65 2,796.80

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S. No.	Description	Unit	Rate in Rs.
28	Supplying and laying hand broken 2-1/2" to 3/4" (64 mm to 19 mm) stone ballast of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with all lead and lift complete (actual compacted depth shall be considered for payment)	100 Cft. Cu.m.	7,761.52 2,740.96
29	Supplying and laying machine crushed 2-1/2" to 3/4" (64 mm to 19 mm) stone ballast of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with 10 miles lead and all lift complete (actual compacted depth shall be considered for payment)	100 Cft. Cu.m.	8,261.52 2,917.53
30	Supplying and laying hand broken 2" to 1/2" (51 mm to 13 mm) stone ballast of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with 10 miles lead and all lift complete (actual compacted depth shall be considered for payment)	100 Cft. Cu.m.	8,091.52 2,857.50
31	Supplying and laying machine crushed 2" to 1/2" (51 mm to 13 mm) stone ballast of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with 10 miles lead and all lift complete (actual compacted depth shall be considered for payment)	100 Cft. Cu.m.	8,529.02 3,012.00
32	Supplying and laying hand broken 1-1/2" to 1/2" (38 mm to 13 mm) stone ballast of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with 10 miles lead and all lift complete (actual compacted depth shall be considered for payment)	100 Cft. Cu.m.	8,341.52 2,945.78
33	Supplying and laying machine crushed 1-1/2" to 1/2" (38 mm to 13 mm) stone ballast of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with 10 miles lead and all lift complete (actual compacted depth shall be considered for payment)	100 Cft. Cu.m.	8,654.02 3,056.14
34	Supplying and laying hand broken 1" to 3/8" (25 mm to 9.5 mm) stone ballast of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with all lead and lift complete (actual compacted depth shall be considered for payment)	100 Cft. Cu.m.	8,247.50 2,912.58

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S. No.	Description	Unit	Rate in Rs.
35	Supplying and laying machine crushed 1" to 3/8" (25 mm to 9.5 mm) stone ballast of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with all lead and lift complete (actual compacted depth shall be considered for payment)	100 Cft.	10,468.75
		Cu.m.	3,697.01
36	Supplying and laying screened grade bajri 3/4" to 3/16" (19 mm to 4.8 mm) of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with all lead and lift complete (actual compacted depth shall be considered for payment)	100 Cft.	9,998.13
		Cu.m.	3,530.81
37	Supplying and laying screened grade bajri 1/2" to 3/16" (13 mm to 4.8 mm) of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with all lead and lift complete (actual compacted depth shall be considered for payment)	100 Cft.	9,873.13
		Cu.m.	3,486.66
38	Supplying and laying screened grade bajri 3/8" to 3/16" (9.5 mm to 4.8 mm) of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with all lead and lift complete (actual compacted depth shall be considered for payment)	100 Cft.	9,748.13
		Cu.m.	3,442.52
39	Supplying and laying screened grade bajri 1/4" to 3/16" (6.4 mm to 4.8 mm) of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with all lead and lift complete (actual compacted depth shall be considered for payment)	100 Cft.	9,623.13
		Cu.m.	3,398.38
40	Supplying and laying machine crushed 3/4" to 3/16" (19 mm to 4.8 mm) stone ballast of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with all lead and lift complete (actual compacted depth shall be considered for payment)	100 Cft.	10,623.13
		Cu.m.	3,751.52
41	Supplying and laying machine crushed 1/2" to 3/16" (13 mm to 4.8 mm) stone ballast of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with all lead and lift complete (actual compacted depth shall be considered for payment)	100 Cft.	10,498.13
		Cu.m.	3,707.38

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S. No.	Description	Unit	Rate in Rs.
42	Supplying and laying machine crushed 3/8" to 3/16" (9.5 mm to 4.8 mm) stone ballast of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with all lead and lift complete (actual compacted depth shall be considered for payment)	100 Cft. Cu.m.	10,373.13 3,663.24
43	Supplying and laying machine crushed 1/4" to 3/16" (6.4 mm to 4.8 mm) stone ballast of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with all lead and lift complete (actual compacted depth shall be considered for payment)	100 Cft. Cu.m.	10,248.13 3,619.09
44	Supplying and laying coarse sand of approved grade and quality over brick soling including filling joints, watering, consolidation with power roller including all lead and lift.	100 Cft. Cu.m.	4,595.75 1,622.98
45	Supplying and laying fine sand of approved grade and quality over brick soling including filling joints, watering, consolidation with power roller including all lead and lift.	100 Cft. Cu.m.	4,970.75 1,755.41
46	Supplying and laying screened grade bajri 3/4" to 3/16" (19 mm to 4.8 mm) of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with all lead and lift complete (actual compacted depth shall be considered for payment) at **PESHAWER.**	100 Cft. Cu.m.	9,373.13 3,310.09
47	Supplying and laying screened grade bajri 3/4" to 3/16" (19 mm to 4.8 mm) of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with all lead and lift complete (actual compacted depth shall be considered for payment) at **QUETTA.**	100 Cft. Cu.m.	8,373.13 2,956.94
48	Supplying and laying screened grade bajri 3/4" to 3/16" (19 mm to 4.8 mm) of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with all lead and lift complete (actual compacted depth shall be considered for payment) at **LAHORE.**	100 Cft. Cu.m.	15,623.13 5,517.26
49	Supplying and laying screened grade bajri 3/8" to 3/16" (9.5 mm to 4.8 mm) of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with all lead and lift complete (actual compacted depth shall be considered for payment) at **PESHAWAR.**	100 Cft. Cu.m.	9,998.13 3,530.81

S. No.	Description	Unit	Rate in Rs.
50	Supplying and laying screened grade bajri 3/8" to 3/16" (9.5 mm to 4.8 mm) of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with all lead and lift complete (actual compacted depth shall be considered for payment) at **QUETTA.**	100 Cft. Cu.m.	8,748.13 3,089.37
51	Supplying and laying screened grade bajri 3/8" to 3/16" (9.5 mm to 4.8 mm) of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with all lead and lift complete (actual compacted depth shall be considered for payment) **at LAHORE.**	100 Cft. Cu.m.	15,623.13 5,517.26
52	Supplying and laying screened grade bajri 1/4" to 3/16" (6.4 mm to 4.8 mm) of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with all lead and lift complete (actual compacted depth shall be considered for payment) at **PESHAWER.**	100 Cft. Cu.m.	9,373.13 3,310.09
53	Supplying and laying screened grade bajri 1/4" to 3/16" (6.4 mm to 4.8 mm) of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with all lead and lift complete (actual compacted depth shall be considered for payment) at **QUETTA.**	100 Cft. Cu.m.	9,998.13 3,530.81
54	Supplying and laying screened grade bajri 1/4" to 3/16" (6.4 mm to 4.8 mm) of approved grade and quality in sub-base or base courses in required grade and camber and compacting to the required density by approved mechanical means (Vibratory Roller, Road Packer and Smooth Wheel Roller etc.) including watering with all lead and lift complete (actual compacted depth shall be considered for payment) at **LAHORE.**	100 Cft. Cu.m.	15,623.13 5,517.26
55	Supplying, stacking and spreading murum of approved quality over stone metalling or brick ballast including watering, consolidation with power roller including 10 miles lead and all lift.	100 Cft. Cu.m.	8,169.30 2,884.97
56	Supplying, stacking and spreading sand of approved quality over brick soling including filling joints, watering, consolidation with power roller including all lead and lift.	100 Cft. Cu.m.	8,546.53 3,018.18
57	Spreading already excavated material available at site over metalling, watering consolidation with power roller including pro-stacking of the excavated material if required including all lead and lift.	100 Cft. Cu.m.	4,546.53 1,605.59

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S. No.	Description	Unit	Rate in Rs.
58	Laying soling bricks stacked at site on edges in herring bond or any other approved pattern to required grade and camber including rolling with power roller, with all lead and lift.	100 Cft. Cu.m.	4,166.56 1,471.41
	Flexible Pavement.		
59	Surface dressing in one coat with bitumen 80/100 or any other approved grade using 40 Lbs. of bitumen and 5 Cft. of 1/2" standard size bajri % Sft. (1.95 Kg. of bitumen and 0.015 Cm of 13 mm standard size bajri per Sq.m.) of road surface complete with rolling.	100 Sq.ft. Sq.m.	3,743.35 402.93
60	Surface dressing in two coats with bitumen 80/100 or any other approved grade using 25 Lbs. of bitumen blinded with 6 Cft. of 1/2" standard size bajri %Sft. (1.22 Kg. of bitumen blinded with 0.018 Cm of 13 mm standard size bajri per Sq.m.) in first coat and 45 Lbs. of bitumen with 3-1/4 Cft. of 1/4" standard size bajri %Sft. (2.19 Kg. of bitumen with 0-01 Cm of 6.4 mm standard size bajri per Sq.m.) in second coat of road surface complete with rolling .	100 Sq.ft. Sq.m.	6,920.61 744.93
61	Surface dressing with bitumen 80/100 or any other approved grade on a priming coat of liquid asphalt (cut-backs) of any approved grade using primer @ 22 Lbs. and bitumen @ 35 Lbs. with 5 Cft. of 1/2" standard size bajri %Sft. (primer @ 1.07 Kg. and bitumen 1.71 Kg. with 0.015 C.m of 13 mm standard size.bajri per Sqm.) of road surface complete with rolling.	100 Sq.ft. Sq.m.	4,726.77 508.79
62	Providing and laying 2" (51 mm) thick consolidated full grout with bitumen 30/40 or any other approved grade for grouting and bitumen 80/100 or any other approved grade for seal coat using 110 Lbs. bitumen and 20 Cft. of 1-1/2" standard size crushed stone ballast %Sft. (5.37 Kg. bitumen and 0.06 Cu.m. of 38 mm standard size crushed stone ballast per Sq.m.) including blinding with 6 Cft. of 1/2" standard size bajri %Sft. (0.018 Cm of 13 mm standard size bajri per Sq.m.) and a seal coat with 30 Lbs bitumen and 3-1/2 Cft. of 1/4" standard size bajri % Sft. (1.46 Kg. bitumen and 0.01 Cu.m. of 6.4 mm standard size bajri per S.m) on road surface inculding priming coat @20 Lbs per %Sft complete with rolling.	100 Sq.ft. Sq.m.	12,163.46 1,309.26
63	Providing and laying 3" (76 mm) thick consolidated full grout with bitumen 30/40 or any other approved grade for grouting and bitumen 80/100 or any other approved grade for seal coat using 165 Lbs. bitumen and 30 Cft. of 2" standard size crushed stone ballast per 100 Sft. (8-06 Kg. bitumen and 0.09 Cu.m. of 51 mm standard size crushed stone ballast per Sq.m.) including blinding with 6 Cft. of 1/2" standard size bajri %Sft. (0.018 Cu.m. of 13 mm standard size bajri per S.m.) and a seal coat with 30 Lbs bitumen per %Sft. and 3-1/4 Cft. of 1/4" standard size bajri %Sft. (1.46 Kg. bitumen and 0.01 Cu.m. of 6.4 mm standard size bajri per Sq.m.) on road surface inculding priming coat @20 Lbs per %Sft complete with rolling .	100 Sq.ft. Sq.m.	16,833.70 1,811.96

S. No.	Description	Unit	Rate in Rs.
64	Providing and laying 2" (51 mm) consolidated thickness of semi-grout with bitumen 80/100 or any other approved grade using 45 Lbs. bitumen and 20 Cft. of 1-1/2" standard size crushed stone ballast %Sft. (2.19 Kg. bitumen and 0.06 Cu.m. of 38 mm standard size crushed stone ballast per Sq.m-) including blinding with 6 Cft. of 1/2" standard size bajri %Sft. (0.018 Cu.m. of 13 mm standard size bajri per S.m) and a seal coat with 25 Lbs bitumen and 3-1/2 Cft. of 1/4" standard size bajri %Sft. (1.22 Kg. bitumen and 0.01 Cu.m. of 6.4 mm standard size bajri per S.m) on road surface inculding priming coat @20 Lbs per %Sft complete with rolling.	100 Sq.ft.	8,193.34
		Sq.m.	881.92
65	Providing and laying 1" (25 mm) consolidated thickness of asphalt macadam with liquid asphalt (cutbacks) of any approved grade with premixed sand seal coat using 15 Lbs. cut-backs %Sft. (0.73 Kg. cutbacks per Sq.m.) for tack coat and 4 Lbs. per Cft. of 1/2" standard size baJri @ 10 Cft. %Sft. 64.07 Kg. per Cu.m. of 13 mm standard bajri @ 0.03 Cu.m. per Sq.m. for carpet and 8 Lbs. per Cft. of coarse sand 2-1/2 cft % Sft. (128.15 Kg. per Cu.m. of coarse sand @ 0.007 cm per Sq.m.) for seal coat: on road surface, inculding priming coat @20 Lbs per %Sft complete with rolling.	100 Sq.ft.	7,147.32
		Sq.m.	769.33
66	Providing and laying 2" (51 mm) consolidated thickness of asphalt macadam with liquid asphalt (cutbacks) of approved grade with precoated bajri seal coat using cut-backs @ 3-1/2 Lbs. per Cft. of aggregate of 1" and 3/4" standard size crushed stone ballast @ 15 Cft. and 5 Cft. per %Sft. respectively (56.06 Kg. per Cu.m. of aggregate of 25 mm and 19 mm standard size crushed stone ballast @ 0.045 Cu.m. and 0.015 cm per Sq.m. respectively) for base coat and 4 Lbs. per Cft. of 1/4" standard size bajri @ 6 Cft. % Sft. 64.07 kg. per Cu.m. of 6.4 mm standard size bajri @ 0.018 Cm per Sq.m. for its top; on road surface, inculding priming coat @20 Lbs per %Sft complete with rolling.	100 Sq.ft.	9,769.70
		Sq.m.	1,051.60
67	Providing and laying 3" (76 mm) consolidated thickness of asphalt macadam with liquid asphalt (cutbacks) of any approved grade with precoated bajri seal coat using cut-backs @ 3-1/2 Lbs. per Cft. of 1-1/2" and 1" standard size crushed stone ballast @ 22 Cft. and 8 Cft. %Sft. respectively (56.06 Kg. per Cum of 38 mm and 25 mm standard size crushed stone ballast @ 0.067 Cum and 0.024 cm per Sq.m. respectively) for base coat including 4 Lbs. of cut-backs per Cft. of 1/4" standard size bajri @ 8 Cft. %Sft (64 Kg of cut-backs per cum of 6.4 mm standard size bajri @ 0.024 cum per Sqm.) for top coat; on road surface, inculding priming coat @20 Lbs per %Sft complete with rolling.	100 Sq.ft.	14,652.17
		Sq.m.	1,577.14

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S. No.	Description	Unit	Rate in Rs.
68	Providing and laying 2" (51 mm) consolidated thickness of asphalt macadam with liquid asphalt (cutbacks) of any approved grade with liquid seal coat using cut-backs @ 3-1/2 Lbs. per Cft. of 1" and 3/4" standard size crushed stone ballast @ 15 Cft. and 5 Cft. %Sft. respectively (56.06 Kg. per Cum of 25 mm and 19 mm standard size crushed stone ballast @ 0.045 Cum and 0.015 Cum respectively) for base coat including 30 lbs. of cut-backs for liquid seat coat with 5 Cft. of 1/4" standard size bajri %Sft. (1.46 Kg of cut-backs of liquid seal coat with 0.015 Cum of 6.4 mm standard size bajri per Sq.m.) for blinding on road surface, inculding priming coat @20 Lbs per %Sft complete with rolling.	100 Sq.ft. Sq.m.	10,278.86 1,106.41
69	Providing and laying 3" (76 mm) consolidated thickness of asphalt macadam with liquid asphalt (cut- backs) of any approved grade with liquid seal coat using cut-backs @ 3-1/2 Lbs. per Cft. of 1-1/2" and 1" standard size crushed stone ballast @ 22 Cft. and 8 Cft. %Sft. respectively (56.06 Kg. per Cum of 38 mm and 25 mm standard size crushed stone ballast @ 0.067 Cum and 0.024 Cum per Sq.m. respectively) for base coat and 30 Lbs. of cut-backs for liquid seal coat and 5 Cft. of 1/4" standard size bajri for its blinding %Sft. (1.46 Kg of cut-backs for liquid seal coat with 0.015 Cum of 6.4 mm standard size bajri for blinding per Sqm.); on road surface, inculding priming coat @20 Lbs per %Sft complete with rolling.	100 Sq.ft. Sq.m.	13,876.47 1,493.65
70	Providing and laying 1-1/2" (38 mm) consolidated thickness of asphalt concrete using liquid asphalt (cul-backs) of any approved grade with pre-mixed coarse sand flushing using 3-1/2 Lbs. cut-backs per Cft. of 1/2" standard size crushed stone ballast @ 12 Cft. %Sft. and 8 Lbs. of bitumen cut-backs per Cft. of coarse sand @ 6 Cft- %Sft. (56.06 Kg. cut-backs per Cum of 13 mm standard size cashed stone Ballast @ 0.037 Cum per Sq.m. and 128.14 Kg. of bitumen cut-back per Cm of coarse sand @ 0.018 Cum per Sq.m.) for asphaltic concrete, sand flushing with 2 Cft. of sand mixed with 16 Lbs. of cut-backs %Sft. of road surface including 5 Lbs. of cut-back %Sft. (0.006 Cu.m. of sand mixed with 0.78 Kg. of cut-backs per 5 P.Sq.m. road surface including 0.024 Kg. of cut-backs per Sq.m. of road surface) for painting edging inculding priming coat @20 Lbs per %Sft complete with rolling.	100 Sq.ft. Sq.m.	10,304.38 1,109.15
71	Providing and laying 2" (51 mm) consolidated thickness of asphalt concrete using liquid asphalt (cutbacks) of any approved grade with pre-mixed coarse sand flushing using 3-1/2 Lbs. cut-backs per Cft. of 3/4" standard size crushed stone ballast @ 16 Cft. %Sft. and 8 Lbs. of cut-backs per Cft. of coarse sand at 8 Cft. %Sft. for asphatt concrete (56.06 Kg. per Cum of 19 mm standard size stone Ballast @ 0.049 Cum per Sq.m. and 128.14 Kg. per Cum of coarse sand at 0.024 Cum per Sq.m.) for asphaltic concrete, sand flushing with 2 Cft. of sand mixed with 16 Lbs. of cut-backs %Sft. of road surface including 5 Lbs of cut-back %Sft. (0.006 Cum of sand mixed with 0.78 Kg.of cut-backs per Sq.m. including 0.024 Kg. of cut-backs per Sq.m. of road surface) for painting edging complete with roling .	100 Sq.ft. Sq.m.	13,030.15 1,402.55

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S. No.	Description	Unit	Rate in Rs.
72	Providing and laying 2-1/2" (64 mm) consolidated thickness of asphalt concrete using liquid asphalt (cut-backs) of any approved grade with pre-mixed coarse sand flushing using 3-1/2 Lbs. cut-backs per Cft. of 1" standard size crushed stone ballast @ 20 Cft. %Sft. and 8 Lbs. of cut-backs per Cft. of coarse sand at 10 Cft. %Sft. (56.06 Kg. per Cum of 25 mm standard size crushing stone Ballast @ 0.06 Cum per Sq.m. and 128.14 Kg. of bitumen cut-backs per Cum of coarse sand at 0.03 Cum per Sq.m.) for asphaltic concrete, sand flushing with 2 Cft. of sand mixed with 16 Lbs. of cut-backs %Sft. (0.006 Cum of sand mixed with 0.78 Kg. of cut-backs per Sq.m.) including 5 Lbs. of cut-backs %Sft. (0.024 Kg. of cut-backs per Sq.m.) of road surface for painting edging inculding priming coat @20 Lbs per %Sft complete with rolling.	100 Sq.ft. Sq.m.	15,936.46 1,715.38
73	Providing and laying 1" (25 mm) consolidated thickness of pre-mixed sheet asphalt using liquid asphalt (cut-backs) of any approved grade using cut-backs @ 20 Lbs. %Sft. (0.976 Kg. per Sq.m.) for tack coat 3-1/2 Lbs. per Cft. of 1/2" (56.06 Kg. per Cum of 13 mm standard size crushing stone Ballast @ 5-1/2 Cft.%Sft. and 8 Lbs. of bitumen per Cft (0.016 Cum per Sq.m.) and 128.14 Kg. P. Cu.m..of course sand at 5-1/2 Cft. P. %Sft. (0.016 Cu.m. P. Sq.m.) of road surface complete with rolling.	100 Sq.ft. Sq.m.	7,670.35 825.63
74	Applying renewal coat with bitumen 80/100 or any other approved grade using 25 Lbs. of bitumen with 4 Cft. of 1/4" standard size bajri %Sft (1.22 Kg. of bitumen with 0.012 Cum. per Sq.m. of 6.4 mm standard size bajri) of road surface complete with rolling..	100 Sq.ft. Sq.m.	2,688.22 289.36
75	Providing and laying hot-mix bituminous concrete runway pavement laid with mechanical paver and mixed in central mixing plant in required thickness and density, rolled hot with different types of rollers complete as per specifications and Job-mix formula and design; upto 1-1/2" (38 mm) thickness inculding priming coat @20 Lbs per %Sft complete.	Ton Tonne	13,434.14 13,221.95
76	Providing and laying hot-mix bituminous concrete runway pavement laid with mechanical paver and mixed in central mixing plant in required thickness and density, rolled hot with different types of rollers complete as per specifications and job-mix formula and design: in two layers upto 3" (76 mm) thickness inculding priming coat @20 Lbs per %Sft complete..	Ton Tonne	13,429.73 13,217.62
77	Providing and laying hot-mix bituminous concrete pavement laid with mechanical paver and mixed in central mixing plant in required thickness and density, rolled hot with different types of rollers complete as per specifications and job-mix formula and design: in single layer upto 1-1/2" (38 mm) thickness inculding priming coat @20 Lbs per %Sft complete.	Ton Tonne	12,858.73 12,655.63

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S. No.	Description	Unit	Rate in Rs.
78	Providing and laying hot-mix bituminous concrete runway pavement laid with mechanical paver and mixed in central mixing plant in required thickness and density, rolled hot with different types of rollers complete as per specifications and Job-mix formula and design: in double layer upto 2-1/2" (64 mm) thickness inculding priming coat @20 Lbs per %Sft complete.	Ton Tonne	12,859.58 12,656.46
	RIGID PAVEMENT (CEMENT CONCRETE ROADS).		
79	Providing and laying 4" (102 mm) thick not leaner than 1:2:4 cement concrete (minimum works cube crushing strength of 2250 Lbs. PSI (158 Kg. per Sq.cm. at 28 days) in road, paths, crete-ways etc. using graded screened bajri in panels of approved size laid to required gradient and camber over any sub-grade including cost of necessary form work and its removal, compacting with vibrators (immersion or screen or both) belting the surface with canvas belt, roughening the surface after laying concrete with brush and curing etc. complete..	100 Sq.ft. Sq.m.	12,718.69 1,369.03
80	Extra on item 79 for every additional thickness of 1 /2" (13 mm), (deduct at the same rate for lesser thickness).	100 Sq.ft. Sq.m.	1,759.01 189.34
81	Extra if crushed graded boulders of approved gauge are instead of graded screened bajri in item 82 (minimum works cube crushing strength at 28 days = 3000 Lbs/Sq.in or 211 Kg./Sq.cm.) .	100 Sq.ft. Sq.m.	169.13 18.20
82	Extra for every additional thickness of 1/2" (13 mm) on the items where crushed graded boulders are used instead of graded screened bajri.	100 Sq.ft. Sq.m.	1,779.04 191.49
83	Extra if 50% screened graded bajri and 50% crushed graded boulders are used in item 79 (minimum works cube crushing strength at 28 days = average of 2250 to 3000 Lbs/Sq.in or 158 to 211 Kg/Sq.cm.).	100 Sq.ft. Sq.m.	84.56 9.10
84	Extra for every additional thickness of 1/2" (13 mm) on the items where 50% screened graded bajri and 50% crushed graded boulders are used .	100 Sq.ft. Sq.m.	362.54 39.02
85	Providing and laying 4" (102 mm) thick not leaner than 1:2:4 cement concrete (minimum works cube crushing strength of 2250 Lbs/Sq.in or 158 Kg/Sq.cm. in roads, paths, creteways etc. using vitrified brick ballast in panels of approved size laid to required gradient and camber over any sub-grade including cost of necessary form work and its removal, compacting with vibrator (immersion or screen or both) belting the surface with canvas belt, roughening the surface after laying the concrete with brush and curing etc. complete.	100 Sq.ft. Sq.m.	12,723.44 1,369.54
86	Extra for every additional thickness of 1/2" (13 mm) on the items where brick ballast is used instead of graded screened bajri..	100 Sq.ft. Sq.m.	1,762.28 189.69

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S. No.	Description	Unit	Rate in Rs.
87	Providing and laying 4" (102 mm) thick 1:3:6 C.C. (minimum works cube crushing strength of 1500 PSI or 105 Kg/Sq.cm. at 28 days) in roads, paths, Crete ways etc. using graded screened bajri in panels of approved size laid to required gradient and camber including cost of necessary form work and its removal, compacting with vibrators (immersion or screen or both) belting and roughening the surface after laying concrete, with brush and curing etc., complete.	100 Sq.ft. Sq.m.	11,328.91 1,219.43
88	Extra on item No. 87 for every additional thickness of 1/2" (13 mm) of cement concrete 1:3:6.	100 Sq.ft. Sq.m.	1,542.36 166.02
89	Providing and laying 4" (102 mm) thick cement concrete not leaner than 1: 1-1/2:3 (minimum works cube strength of 2812 PSI or 198 Kg/Sq.cm. at 28 days) in roads, paths, crete-ways etc. using graded screened bajri in panels of approved size laid to required gradient and camber including cost of necessary form work and its removal, compacting with vibrators (immersion or screen or both) belting and roughening the surface after laying concrete, with brush and curing etc., complete .	100 Sq.ft. Sq.m.	14,382.70 1,548.14
90	Extra on item No. 89 for every additional thickness of 1/2" (13 mm) of cement concrete 1:1-1/2:3.	100 Sq.ft. Sq.m.	1,916.49 206.29
91	Extra on items 79, 85, 87 and 89 if bituminised waterproof paper of best quality is used while laying cement concrete .	100 Sq.ft. Sq.m.	4,886.44 525.97
92	Extra on items 79, 85, 87 and 89 if polythene sheet of 500 gauge is used while laying cement concrete .	100 Sq.ft. Sq.m.	972.50 104.68
93	Extra if 2" (51 mm) thick sand cushion (blanket course) is used in items 79, 85, 87 and 89 .	100 Sq.ft. Sq.m.	945.00 101.72
94	Providing and laying 1:4:8 cement concrete in any thickness using 2" (51 mm) and down gauge stone ballast of approved grade and quality over prepared sub-grade or sand cushion in roads, paths, creteways laid to required gradient and camber including cost of necessary form work and its removal compacting with vibrators including curing etc. complete .	100 Cft. Cu.m.	27,877.27 9,844.77
95	Providing and laying M.S. reinforcement bars with and including the cost of straightening, cutting, bending, binding wastage and such overlaps as are not shown in the drawings, binding wire, cement concrete 1:2:4 precast or M.S. chairs, and placing in position on cement concret precast of M.S. chairs tying with binding wire etc. in all kinds of RCC roads, paths and runways etc.	Cwt. kg.	12,945.26 254.81

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S. No.	Description	Unit	Rate in Rs.
96	Providing and laying M.S. ties or dowel bars of required length and diameters in longitudinal, transverse or other type of joints of cement concrete slabs laid and held in position in form work or on precast chairs at various spacings including straightening, cutting, wastage, etc., and including the cost of M.S. sheet caps, painting and greasing of bars where required as per design complete.	Cwt. kg.	12,958.76 255.08
97	Supplying and stacking murum along side of road alignment from approved quarry including all lead and lift.	100 Cft. Cu.m.	3,093.75 1,092.55
98	Spreading bajri stacked at site and of any size and upto any thickness to template in paths and drive ways including watering and rolling with hand roller complete with all lead and lift.	100 Cft. Cu.m.	3,320.50 1,172.62
99	Spreading coarse sand stacked at site to template in paths and drive ways including watering and rolling with hand roller complete with all lead and lift.	100 Cft. Cu.m.	3,112.50 1,099.17
	Joints.		
100	Providing bitumen filler of approved proprietory brand in expansion joints etc. using 90 Lbs. of bitumen, 0.2 Lb. of cement and 0.8 Cft. of sand per Cft. (1442 Kg. of bitumen, 3.2 Kg. of cement and 0.8 Cum per Cum) of filler and fixing in position in an approved manner complete.	Cft. Cu.m.	7,321.87 258,569.68
101	Providing and fixing PVC water-stop and expansion Joint plain 6" to 7" (152 mm to 179 mm) wide placed horizontally at 2" or 51 mm depth from top surface of pavement, 1/2" (13 mm) wide joint filler of fibre board in bottom and top filled with premoutded bitumen filler of approved proprietory brand complete.	100 Rft. Ru.m.	23,857.69 782.73
102	Providing and filling dummy joint 1/4" (6.4 mm) wide and 3" (76 mm) deep in roads, paths or crete-ways etc. with premoulded bitumen filler of approved proprietory brand complete.	100 Rft. Ru.m.	3,836.43 125.87
103	Providing and making longitudinal joint of tongued and grooved type in RCC or CC pavement including cost of work etc. complete.	100 Rft. Ru.m.	2,237.72 73.42
104	Providing water tight Joint, with 5" (127 mm) wide copper strip of 24 B.W.G. corrugated at centre and 1-1/2" (38 mm) dia staggered holes at 4" (102 mm) pitch placed horizontally at 2" (51 mm) depth from top surface pavement, 1/2" (13 mm) wide Joint filler of soft wood at bottom and top filled with P.B. 4 complete.	100 Rft. Ru.m.	40,647.89 1,333.59
105	Providing water tight joint with 5" (127 mm) wide copper strips of 24 B.W.G. corrugated at centre and 1-1/2" (38 mm) dia staggered holes at 4" (102 mm) pitch placed at 2" (51 mm) depth from top surface of pavement, 1/2" (13 mm) wide joint filler of fibre board at bottom and top filled with P.B. 4 complete.	100 Rft. Ru.m.	41,724.14 1,368.90

S. No.	Description	Unit	Rate in Rs.
106	Filling longitudinal construction keyed joints with sealing compound of approved brand complete.	100 Rft. Ru.m.	1,866.25 61.23
107	Providing and fixing in position cork sheet of required width and depth in expansion joints etc., complete.	Cft. Cu.m.	120.03 393.82
	BOUNDARY, PILLARS, FURLONG, STONES AND MILE STONES		
108	Providing and fixing 6" x 6" x 2-1/2 ft. (152 mm x 152 mm x 762 mm) precast 1:2:4 C.C. boundary pillars using graded screened bajri embedded in C.C. 1:4:8 form work and its removal, compacting and curing including cost of excavation, C.C. 1:4:8 back filling of excavated stuff cement plaster with 1:3 cement mortar, engraving and writing letters of approved size and painting 2 coats as desired .	Each	4,550.89 4,550.89
109	Providing and fixing 6" x 6' x 2-1/2 ft. (152 mm x 152 mm x 762 mm) stone boundary pillars embedded in C.C. 1:4:8 including cost of excavation, C.C. 1:4:8 back filling of excavated stuff cement plaster with 1:3 cement mortar, engraving and writing letters of approved size and painting 2 coats as desired complete .	Each	1,135.27 1,135.27
110	Providing and fixing 9" x 4" x 2-1/2 ft. (229 mm x 102 mm x 762 mm) precast 1:2:4 C.C. furlong stone using graded screened bajri embedded in C.C. 1:4:8 form work and its removal, compacting and curing including cost of excavation, C.C. 1:4:8 back filling of excavated stuff cement plaster with 1:3 cement mortar, engraving and writing letters of approved size and painting 2 coats as desired complete .	Each	1,196.64 1,196.64
111	Providing and fixing 9" x 4" x 2-1/2 ft. (229 mm x 102 mm x 762 mm) furlong stone of local quarry of hard texture with top one foot chisel dressed on all sides as per approved design embedded in C.C. 1:4:8 including cost of excavation, C.C. 1:4:8 back filling of excavated stuff cement plaster with 1:3 cement mortar, engraving and writing letters of approved size and painting 2 coats as desired .	Each	990.10 990.10
112	Providing and fixing 3-1/2' x 1-1/2' x 1 ft. (1067 mm x 457 mm x 305 mm) 1:2:4 C.C. precast mile stone of approved design with triangular face using graded screened baJri embedded in C.C. 1:4:8 from work and its removal compacting curing including cost of excavation, embedded in C.C. 1:4:8 back filling of excavated stuff cement plaster with 1:3 cement mortar, engraving and writing letters of approved size and painting 2 coats as desired.	Each	4,695.16 4,695.16

S. No.	Description	Unit	Rate in Rs.
	KERBS. EDGE STONE AND QUADRANTS		
113	Providing and laying kerb stone 18" x 12" x 6" (457 mm x 305 mm x 152 mm) obtained from approved quarry, chisel dressed on top and sides, laid in cement mortar t:4 ruled cement pointing in cement mortar 1:3 including cost of excavation and back filling of excavated stuff and its disposal within one chain lead as desired .	100 Rft. Ru.m.	21,075.06 691.44
114	Providing and laying road kerb of 1st class burnt brick masonry laid in cement mortar 1:4, 9" (229 mm) wide and 12" (305 mm) deep with round moulded corners of bricks including cost of excavation and back filling of excavated stuff and its disposal within one chain lead as desired .	100 Rft. Ru.m.	31,512.76 1,033.88
115	Providing and laying road kerb of precast cement concrete 1:2:4 (24" long 6" wide and 12" deep (610 mm long 152 mm wide and 305 mm deep) using screened graded bajri, from work and its removal compacting and curing laid in cement mortar 1:4 and cement plaster 1:4 neatly finished including cost of excavation and back filling of excavated stuff and its disposal within one chain lead as desired.	100 Rft. Ru.m.	33,910.87 1,112.56
116	Less in item 115 if cement concrete 1:3:6 is used instead of cement concrete 1:2:4 in cement concrete precast kerb (24" x 12" x 6" or 610 mm x 305 mm x 1 52 mm).	100 Rft. Ru.m.	2,450.62 80.40
117	Providing and laying road kerb of cement concrete 1:2:4 using screened graded bajri 4" wide and 12" deep (102 mm wide and 305 mm deep) cast in situ, form work and its removal, compacting and curing, filling joints with bitumen, cement plaster 1:4 neatly finished including cost of excavation and back filling of excavated stuff and its disposal within one chain lead as desired .	100 Rft. Ru.m.	24,483.16 803.25
118	Less in item 117 if cement concrete 1-3:6 is used instead of cement concrete 1:2:4 in road kerb 12" (305 mm) deep 4" (102 mm) wide cast in situ.	100 Rft. Ru.m.	1,624.71 53.30
119	Providing and laying edge stone 12" (305 mm) long, 9" (229 mm) deep and 6" (152 mm) wide obtained from approved quarry, chisel dressed on top and sides, laid in cement mortar 1:4 ruled cement pointing in cement mortar 1:3, including cost of excavation, back filling of excavated stuff and its disposal within one chain (30.5 m) lead as desired.	100 Rft. Ru.m.	18,210.48 597.46
120	Providing and laying best quality Jhama brick masonry 4-1/2" (114 mm) laid in cement mortar 1:4 as edge stone 9" (229 mm) deep, 3" (76 mm) thick cement concrete 1:4:8 in bed, ruled cement pointing in cement mortar 1:3, including cost of excavation, back filling of excavated stuff and its disposal within one chain (30.5 m) lead as desired..	100 Rft. Ru.m.	17,961.36 589.28

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S. No.	Description	Unit	Rate in Rs.
121	Providing and laying 6" (152 mm) wide precast cement eoncrete 1:2:4 edge stone 12" (305 mm) long, 9" (229 mm) deep using graded screened bajri, form work and its removal, compacting and curing, laid in cement mortar 1:4 including cost of excavation, back filling of excavated stuff and its disposal within one chain (30.5 m) lead as desired.	100 Rft. Ru.m.	25,360.32 832.03
122	Less in item 121 if cement concrete 1:3:6 is used instead of cement concrete 1:2:4 in cement concrete precast edge stone (12" x 9" x 6" or 305 mm x 229 mm x 152 mm) .	100 Rft. Ru.m.	1,772.41 58.15
123	Providing and laying cement concrete 1:2:4 edge stone 4" (102 mm) wide and 12" (305 mm) deep using graded screened bajri cast in situ, form work and its removal, compacting and curing, filling, Joints with bitumen I/C cost of excavation, back filling of excavated stuff and its disposal within one chain (30.5 m) lead as desired .	100 Rft. Ru.m.	19,552.25 641.48
124	Less in item 123 if cement concrete 1:3:6 is used instead of cement concrete 1:2:4 cast in situ 4" (102 mm) wide and 12" (305 mm) deep .	100 Rft. Ru.m.	1,744.89 57.25
125	Providing and laying 6" (152 mm) thick stone in channels or quadrants obtained from approved quarry, finely chisel dressed on exposed faces, laid with proper slope in cement mortar 1:4 including 6" (152 mm) thick concrete bed 1:4:8, cement pointing in cement mortar 1;3 including cost of excavation, curing and back-filling of excavated stuff and its disposal within one chain (30.5 m) lead as desired .	100 Sq.ft. Sq.m.	27,263.13 2,934.58
126	Providing and laying first class burnt brick masonry laid in cement mortar 1:4 on edge in channels or quadrants laid with proper slope including 6" (152 mm) thick cement concrete bed 1:4:8, cement pointing with cement mortar 1:3 including cost of excavation, curing and back filling of excavated stuff and its disposal within one chain (30.5 m) lead as desired.	100 Sq.ft. Sq.m.	34,638.71 3,728.48
127	Providing and laying 6" (152 mm) thick cement concrete 1:2:4 block masonry, 12" x 9" x 6" (305 mm x 229 mm x 152 mm) using graded screened bajri laid in cement mortar 1:4, in channel, or quadrants I/C 6" (152 mm) thick cement concrete bed 1:4:8 and 3/4 " (19 mm) thick cement plaster 1:4 finished smooth, including cost of excavation, curing and back filling of excavated stuff and its disposal within one chain (30.5 m) lead as desired.	100 Sq.ft. Sq.m.	42,609.17 4,586.41
128	Less item 127 if cement concrete 1:3:6 blocks are used instead of cement concrete 1:2:4 in channels or quadrants (12" x 9" x 6" or 305 mm x 229 mm x 152 mm).	100 Sq.ft. Sq.m.	8,314.23 894.94

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S. No.	Description	Unit	Rate in Rs.
129	Providing and laying 6" (152 mm) thick cement concrete 1:2:4 cast in situ using graded screened bajri in channels or quadrant form work and its removal I/C 6" (152 mm) thick cement concrete bed 1:4:8, 3/4" (19 mm) thick cement plaster 1:4 finished smooth including cost of excavation, curing and back filling of excavated stuff and its disposal within one chain (30.5 m) lead as desired.	100 Sq.ft. Sq.m.	39,688.91 4,272.07
130	Less item 129 if cement concrete 1:3:6 is used instead of cement concrete 1:2:4 cast in situ in channels or quadrants (12" x 9" x 6" or 305 mm x 229 mm x 152 mm) .	100 Sq.ft. Sq.m.	2,489.81 268.00
	ROAD MAINTENANCE		
131	Removing the existing worn out bituminous surface, having pot holes and ruts in patches of regular shape brushing and re-carpeting with 1" (25 mm) thick (consolidated) asphalt macadam as per specifications complete, including disposal of excavated stuff within one chain (30.5 m) lead as desired .	100 Sq.ft. Sq.m.	7,723.10 831.24
132	Removing the existing worn out bituminous surface, having pot holes and ruts in patches of regular shape brushing and re-carpeting with 2" (51 mm) thick (consolidated) asphalt macadam as per specifications complete, including disposal of excavated stuff within one chain (30.5 m) lead as desired.	100 Sq.ft. Sq.m.	10,520.92 1,132.37
133	Removing the existing worn out bituminous surface, having pot holes and ruts in patches of regular shape brushing and re-carpeting with 3" (51 mm) thick (consolidated) asphalt macadam as per specifications complete, including disposal of excavated stuff within one chain (30.5 m) lead as desired.	100 Sq.ft. Sq.m.	15,253.14 1,641.83
134	Dismantling bitumen carpet of any description from existing road surface including its removal and disposal within three chains (91 m) lead as desired.	100 Sq.ft. Sq.m.	1,190.00 128.09
135	Dismantling of stone metalling from existing road from where bitumen carpet has already been removed and stacking the useful material within one chain (30.5 m) lead including disposal of surplus stuff within 3 chains (91 m) lead as desired.	100 Cft. Cu.m.	5,940.00 2,097.69
136	Dismantling brick metalling from existing road from where bitumen carpet has already been removed and stacking the useful material within one chain (30.5 m) lead including disposal of surplus stuff within 3 chains (91 m) lead as desired.	100 Cft. Cu.m.	4,752.50 1,678.33

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S. No.	Description	Unit	Rate in Rs.
137	Dismantling brick soling from existing road from where bitumen carpet has already been removed and stacking the useful material within one chain (30.5 m) lead including disposal of surplus stuff within 3 chains (91 m) lead as desired.	100 Cft. Cu.m.	2,971.25 1,049.29
138	Dismantling soling stone from existing road from where bitumen carpet has already been removed and stacking the useful material within one chain (30.5 m) lead including disposal of surplus stuff. within 3 chains (91 m) lead as desired.	100 Cft. Cu.m.	4,158.75 1,468.65
139	Cutting the worn out surface in all kinds of cement concrete roads having pot holes and ruts upto any depth and any shape and stacking the useful material within one chain (30.5 m) lead including disposal of surplus excavated stuff within 3 chains (91 m) lead as desired.	100 Sq.ft. Sq.m.	5,002.50 538.46
140	Scarifying sub-base, base or wearing coat surface or flexible pavement with pick axes or by any other approved means upto required depth including disposal of rubbish within 3 chain (91 m) complete as required.	100 Sq.ft. Sq.m.	596.25 64.18
141	Screening existing stone or brick metal or bajri in different screens of any size and mesh along side of alignment including stacking in different grades and disposal of surplus stuff within 3 chains (91 m) lead as desired .	100 Cft. Cu.m.	1,485.88 524.73
142	Filling joints or cracks with bitumen upto any depth and width including brushing, washing with kerosene oil and blinding with sand etc. complete as desired.	Cft. Cu.m.	7,597.96 268,319.80
143	Cutting trenches through bituminous road for laying pipes etc. in any width and upto required depth including dismantling kerb stones, edge stones or channels, replacing soling stones (old and new 10%) with hand refilling with (old and new 25%) ballast blinded with murum, watering and ramming complete, retixing edge stone, kerb stones or channels in cement mortar 1:3 as directed including recarpeting with 1" (25 mm) thick (consolidated) asphalt macadam as per specification complete (cost of new stone, ballast and new murum is inclusive): 1" (25 mm) thick consolidated asphalt macadam re-carpet.	100 Sq.ft. Sq.m.	20,488.48 2,205.36
144	Cutting trenches through bituminous road for laying pipes etc. in any width and upto required depth including dismantling kerb stones, edge stones or channels, replacing soling stones (old and new 10%) with hand refilling with (old and new 25%) ballast blinded with murum, watering and ramming complete, refixing edge stone, kerb stones or channels in cement mortar 1:3 as directed including recarpeting with 1" (25 mm) thick (consolidated) asphalt macadam as per specification complete (cost of new stone, ballast and new murum is inclusive): 2" (51 mm) thick consolidated asphalt macadam recarpet.	100 Sq.ft. Sq.m.	26,476.33 2,849.89

ROADS AND RUNWAYS

SUB-HEAD CODE 127

S. No.	Description	Unit	Rate in Rs.
145	Cutting trenches through bituminous road for laying pipes etc. in any width and upto required depth including dismantling kerb stones, edge stones or channels, replacing soling stones (oid and new 10%) with hand refilling with (old and new 25%) ballast blinded with murum, watering and ramming complete, refixing edge stone, kerb stones or channels in cement mortar 1:3 as directed including recarpeting with 1" (25 mm) thick (consolidated) asphalt macadam as per specification complete (cost of new stone, ballast and new murum is inclusive): 3" (76 mm) thick consolidated asphalt macadam recarpet.	100 Sq.ft. Sq.m.	28,228.61 3,038.50
146	Cutting trenches through cement concrete road with chisel etc. in any width upto required depth I/C dismantling kerb stones, edge stones, or channels, refilling with cement concrete 1:2:4 using crushed graded boulders of required size and grade including compacting with vibrators etc. complete refixing edge stones, kerb stones or channels in cement mortar 1:3 as desired: 4" (102 mm) thick 1:2:4 cement concrete.	100 Sq.ft. Sq.m.	32,661.55 3,515.66
147	Cutting trenches through cement concrete road with chisel etc. in any width upto required depth I/C dismantling kerb stones, edge stones, or channels, refilling with cement concrete 1:2:4 using crushed graded boulders of required size and grade including compacting with vibrators etc. complete refixing edge stones, kerb stones or channels in cement mortar 1:3 as desired: **extra for every 1/2" (13 mm) thickness over 4" (102 mm) thick 1:2:4 cement concrete 1:2:4 .**	100 Sq.ft. Sq.m.	4,588.61 493.91
	SUB-SURFACE DRAINAGE		
148	Excavation in all kind of soils in trenches and channels including dressing to required section and back filling excavated stuff including watering, ramming etc. in layers as per direction of Engineer-in-Charge and disposal of surplus earth complete: lift upto 5 ft. (1.52 m) and lead upto 100 ft. (30.5 m) .	100 Cft. Cu.m.	1,804.06 637.10
149	Excavation in all kind of soils in trenches and channels including dressing to required section and back filling of excavated stuff including watering, ramming etc. in layers as per direction of, Engineer-in-Charge and disposal of surplus earth complete: **lift 5 ft. to 10 ft.** (1-52 m to 3 m) and lead upto 100ft. (30.5 m) .	100 Cft. Cu.m.	3,607.63 1,274.02
150	Providing and laying open jointed pipe without collar of class "C" or equivalent and fixing in trenches over prepared bed including, cutting, wastage, etc. with all lead and lift as per direction of the Engineer-in-Charge: 4" (100 mm) dia RCC pipe .	Rft. Ru.m.	445.20 1,460.26
151	Providing and laying open jointed pipe without collar of class "C" or equivalent and fixing in trenches over prepared bed including cutting, wastage, etc. with all lead and lift as per direction of the Engineer-in-Charge: 4" (100 mm) dia AC pipe..	Rft. Ru.m.	520.20 1,706.69

ROADS AND RUNWAYS

SUB-HEAD CODE 127

S. No.	Description	Unit	Rate in Rs.
152	Providing and laying open Jointed pipe without collar of class "C" or equivalent and fixing in trenches over prepared bed including cutting, wastage, etc. with all lead and lift as per direction of the, Engineer-in-Charge: 6" (150 mm) dia RCC pipe.	Rft. Ru.m.	707.70 2,321.26
153	Providing and laying open jointed pipe without collar of class "C" or equivalent and fixing in trenches over prepared bed including cutting, wastage, etc. with all lead and lift as per direction of the Engineer-in-Charge: 6" (150 mm) dia AC pipe..	Rft. Ru.m.	835.20 2,740.16
154	Providing and fixing RCC pipe of class "C" or equivalent in trenches including cutting, fitting and jointing with maxphalt composition and cement mortar (1:1) and testing with water including all lead and lift: 6" (150 mm) dia pipe.	Rft. Ru.m.	740.86 2,430.63
155	Providing and fixing RCC pipe of class "C" or equivalent in trenches including cutting, fitting and jointing with maxphalt composition and cement mortar (1:1) and testing with water including all lead and lift: 12" (300 mm) dia pipe.	Rft. Ru.m.	957.48 3,141.33
156	Supplying and stacking with all lead and lift: coarse sand or fine aggregate of approved quality and grading..	100 Cft. Cu.m.	4,002.00 1,413.29
157	Supplying and stacking with all lead and lift: bajri of grading 1-1/2" to 3/16" (38 mm to 4.8 mm).	100 Cft. Cu.m.	6,066.38 2,142.32
158	Supplying and stacking with all lead and lift: peagravel of grade 3/16' (4.8 mm) to 1/16" (1.8 mm).	100 Cft. Cu.m.	4,429.50 1,564.26
159	Supplying and stacking with all lead and lift: coarse sand of grade 3/16" (4.8 mm) to No. 200..	100 Cft. Cu.m.	5,767.63 2,036.82
160	Supplying and stacking with all lead and lift: pit sand (local) .	100 Cft. Cu.m.	4,970.75 1,755.41
161	Supplying and stacking bajri of approved quality 1-1/2" (38 mm) down graded up to 3/4" (19 mm) as per direction of the Engineer-in-Charge, including all lead and lift	100 Cft. Cu.m.	6,054.50 2,138.13
162	Filling in trenches material collected as per items 156 to 161 with or without blinding with coarse sand or fine aggregate in different layers as per design and direction of the Engineer-in-Charge including watering, ramming etc., complete .	100 Cft. Cu.m.	797.38 281.59
163	Providing and laying dry stone uncoarsed rubble pitching up to 12" (305 mm) thick in bottom and sides of channel or drain as per direction of the Engineer-in-Charge .	100 Cft. Cu.m.	10,001.00 3,531.82

ROADS AND RUNWAYS
SUB-HEAD CODE 127

S. No.	Description	Unit	Rate in Rs.
164	Cement pointing to stone pitching in 1:2 cement mortar in channels or drain including curing etc. and raking out joint complete	100 Sq.ft. Sq.m.	2,307.19 248.34

ROAD WORKS WITH MECHANICAL MEANS.

S. No.	Description	Unit	Rate in Rs.
165	Excavation or Cutting un suitable Common Material by mechanical means and dispose of surplus excavaed material upto 10 miles lead complete as per difredction of Engineer incharge.	Per 100 Cft. Per Cum.	1,073.32 379.10
166	Excavation or Cutting un suitable hard rock material by mechanical means and dispose of surplus excavaed material upto 10 miles lead complete as per difredction of Engineer incharge.	Per 100 Cft. Per Cum.	3,228.08 1,140.16
167	Excavation or Cutting unsuitable medium rock material by mechanical mean and dispose of surplus excavaed material upto 10 miles lead complete as per difredction of Engineer incharge..	Per 100 Cft. Per Cum.	2,596.35 917.03
168	Excavation or Cutting unsuitable soft rock material by mechanical mean and dispose of surplus excavaed material upto 10 miles lead complete as per difredction of Engineer incharge..	Per 100 Cft. Per Cum.	2,001.60 706.96
169	Excavation or Cutting surplus common material by mechanical mean and dispose of surplus excavaed material upto 10 miles lead complete as per difredction of Engineer incharge..	Per 100 Cft. Per Cum.	960.21 339.15
170	Excavation or Cutting surplus hard rock material by mechanical mean and dispose of surplus excavaed material upto 10 miles lead complete as per difredction of Engineer incharge..	Per 100 Cft. Per Cum.	3,228.08 1,140.16
171	Excavation or Cutting surplus medium rock material by mechanical mean and dispose of surplus excavaed material upto 10 miles lead complete as per difredction of Engineer incharge..	Per 100 Cft. Per Cum.	2,400.82 847.97
172	Excavation or Cutting surplus soft rock material by mechanical mean and dispose of surplus excavaed material upto 10 miles lead complete as per difredction of Engineer incharge..	Per 100 Cft. Per Cum.	1,989.21 702.59
173	Compaction of Natural ground i/c levelling, dressing and watering complete as per direction of Engineer incharge	Per 100 Sft. Per Sqm.	263.16 28.33
174	Granular back fill including watering and compacting complete as per Engineer incharge.	Per 100 Cft. Per Cum.	5,667.89 2,001.90
175	Common back fill including watering and compacting complete as per Engineer incharge.	Per 100 Cft. Per Cum.	889.09 314.03

ROADS AND RUNWAYS

SUB-HEAD CODE 127

S. No.	Description	Unit	Rate in Rs.
176	Formation of Embankment from road way excavation in common material, including watering and compacting complete as per Engineer incharge.	Per 100 Cft. Per Cum.	1,158.89 409.32
177	Formation of Embankment from road way excavation in hard rock including watering and compacting complete as per Engineer incharge.	Per 100 Cft. Per Cum.	2,945.07 1,040.20
178	Formation of Embankment from road way excavation in medium rock material, including watering and compacting complete as per Engineer incharge.	Per 100 Cft. Per Cum.	3,020.60 1,066.88
179	Formation of Embankment from road way excavation in soft rock material including watering and compacting complete as per Engineer incharge.	Per 100 Cft. Per Cum.	2,721.62 961.28
180	Formation of Embankment from Borrow excavation in common material, including watering and compacting complete as per Engineer incharge.	Per 100 Cft. Per Cum.	2,028.59 716.50
181	Formation of Embankment from structural excavation in common material, including watering and compacting complete as per Engineer incharge.	Per 100 Cft. Per Cum.	659.49 232.93
182	Formation of Embankment from structural excavation in any type of rock material, including watering and compacting complete as per Engineer incharge.	Per 100 Cft. Per Cum.	1,432.85 506.08
183	Subgrade preparation in earth cut including watering and compacting complete as per Engineer incharge.	Per 100 Sft. Per Sqm.	736.33 79.26
184	Subgrade preparation in existing road without any fill including watering and compacting complete as per Engineer incharge.	Per 100 Sft. Per Sqm.	495.67 53.35
185	Improved subgrade (CBR>20),including watering and compacting complete as per Engineer incharge.	Per 100 Cft. Per Cum.	2,739.23 967.50
186	Dressing of berms without extra material, including watering and compacting complete as per Engineer incharge.	Per 100 Sft. Per Sqm.	406.19 43.72
187	Dressing of berms with extra material, including watering and compacting complete as per Engineer incharge.	Per 100 Sft. Per Sqm	462.58 49.79

ROADS AND RUNWAYS
SUB-HEAD CODE 127

S. No.	Description	Unit	Rate in Rs.
	ROAD WORKS MISC. ITEMS		
188	Brick Edging with 1st class burnt bricks in road work complete as per direction of Engineer incharge.	Per Rft	54.29
		Per RM	178.13
189	Traffic road signs category -1, including fixing in cement concrete 1:2:4 complete as per direction of Engineer incharge.	Per Each	16,945.37
		Per Each	16,945.37
190	Traffic road signs category -2, including fixing in cement concrete 1:2:4 complete as per direction of Engineer incharge.	Per Each	21,668.06
		Per Each	21,668.06
191	Traffic road signs category - 3 (a), including fixing in cement concrete 1:2:4 complete as per direction of Engineer incharge.	Per Each	35,638.48
		Per Each	35,638.48
192	Traffic road signs category - 3 (b), including fixing in cement concrete 1:2:4 complete as per direction of Engineer incharge.	Per Each	64,163.97
		Per Each	64,163.97
193	Traffic road signs category - 3 ©, including fixing in cement concrete 1:2:4 complete as per direction of Engineer incharge.	Per Sft	2,588.38
		Per Sqm.	27,861.34
194	Additional panel size 60cm x 30cm, complete as per direction of Engineer incharge.	Per Each	5,513.13
		Per Each	5,513.13
195	Additional panel size 90cm x 30cm	Per Each	7,675.94
		Per Each	7,675.94
196	Pavement marking in non-reflective **CR PAINT** for lines of 15cm width, with road marking machine complete as per direction of Engineer incharge	Per Rft	15.22
		Per RM	49.93
197	Pavement marking in non-reflective **TP PAINT** for lines of 15cm width with road marking machine complete as per direction of Engineer incharge	Per Rft	32.79
		Per RM	107.58
198	Pavement marking in non-reflective **CR PAINT** for lines of 20cm width with road marking machine complete as per direction of Engineer incharge	Per Rft	18.24
		Per RM	59.85
199	Pavement marking in non-reflective **TP PAINT** for lines of 20cm width, with road marking machine complete as per direction of Engineer incharge	Per Rft	41.01
		Per RM	134.54
200	Pavement marking in non-reflective **CR PAINT** for 4.0 meter arrow, with road marking machine complete as per direction of Engineer incharge	Each	600.11
		Each	600.11

S. No.	Description	Unit	Rate in Rs.
201	Pavement marking in non-reflective **TP PAINT** for 4.0 meter arrow , with road marking machine complete as per direction of Engineer incharge	Each	1,364.01
		Each	1,364.01
202	Pavement marking in reflective **CR PAINT** for lines of 15cm width, with road marking machine complete as per direction of Engineer incharge	Per Rft	20.95
		Per RM	68.74
203	Pavement marking in reflective **TP PAINT** for lines of 15cm width, with road marking machine complete as per direction of Engineer incharge	Per Rft	52.82
		Per RM	173.30
204	Pavement marking in reflective **CR PAINT** for lines of 20cm width, with road marking machine complete as per direction of Engineer incharge	Per Rft	25.36
		Per RM	83.22
205	Pavement marking in reflective **TP PAINT** for lines of 20cm width,with road marking machine complete as per direction of Engineer incharge	Per Rft	67.02
		Per RM	219.89
206	Pavement marking in reflective **CR PAINT** for 4.0 meter arrow ,with road marking machine complete as per direction of Engineer incharge	Each	732.67
		Each	732.67
207	Pavement marking in reflective **TP PAINT** for 4.0 meter arrow, with road marking machine complete as per direction of Engineer incharge	Each	2,108.76
		Each	2,108.76
208	Pavement marking in non-reflective **CR PAINT** for stop, with road marking machine complete as per direction of Engineer incharge	Each	462.53
		Each	462.53
209	Pavement marking in non-reflective **TP PAINT** for stop, with road marking machine complete as per direction of Engineer incharge	Each	983.76
		Each	983.76
210	Pavement marking in reflective **CR PAINT** for stop, with road marking machine complete as per direction of Engineer incharge	Each	550.91
		Each	550.91
211	Pavement marking in reflective **TP PAINT** for stop, with road marking machine complete as per direction of Engineer incharge	Each	1,481.01
		Each	1,481.01
212	Refelectorised aluminium pavement stud (raised profile type - single), fixed with epoxy adhesive complete as per direction of the Engineer incharge.	Each	728.01
		Each	728.01

ROADS AND RUNWAYS
SUB-HEAD CODE 127

S. No.	Description	Unit	Rate in Rs.
213	Refelectorised plastic pavement stud (raised profile type - single), fixed with epoxy adhesive complete as per direction of the Engineer incharge.	Each Each	362.67 362.67
214	Refelectorised aluminium pavement stud (raised profile type - double), fixed with epoxy adhesive complete as per direction of the Engineer incharge.	Each Each	793.01 793.01
215	Refelectorised plastic pavement stud (raised profile type - double), fixed with epoxy adhesive complete as per direction of the Engineer incharge.	Each Each	450.17 450.17
	Carriage of 100 Cft Base / Sub Base and Murum Material.		
216	Extra for additional lead from 11 miles to 200 miles on item No.21 to 23, 26 to 35 and 55.	P.Mile	35.10
217	Extra for additional lead from 201 miles to 250 miles on item No.21 to 23, 26 to 35 and 55.	P.Mile	3.25
218	Extra for additional lead from 251 miles and subsequent miles on item No.21 to 23, 26 to 35 and 55.	P.Mile	2.00

FORM WORK AND LABOUR RATE FOR CONCRETING

Code 128

PAKISTAN PUBLIC WORKS DEPARTMENT

FORM-WORK AND LABOUR RATES FPR CONCRETING

SUB-HEAD CODE 128

S. No.	Description	Unit	Rate in Rs.
1	Providing and fixing form work for plain or reinforced cement concrete wall of any thickness and any description in superstructure including assembling, dismantling and removal form site in ground floor (all faces to be measured) .	100 Sq.ft. Sq.m.	5,350.00 575.87
2	Providing and fixing form work for plain or reinforced cement concrete pillars columns of any shape in superstructure including assembling, dismantling and removal from site in ground floor (all faces to be measured).	100 Sq.ft. Sq.m.	6,936.90 746.68
3	Providing and fixing form work for plain or reinforced cement concrete arches in superstructure including assembling, dismantling and removal from site in ground floor (all faces to be measured) .	100 Sq.ft. Sq.m.	8,154.14 877.70
4	Providing and fixing form work for plain or reinforced cement concrete architraves, coping and cornice in superstructure including assembling, dismantling and removal from site in ground floor (all faces to be measured) .	100 Sq.ft. Sq.m.	9,941.29 1,070.07
5	Providing and fixing form work for plain or reinforced cement concrete steps, in superstructure including assembling, dismantling and removal from site. in ground floor (all faces to be measured) .	100 Sq.ft. Sq.m.	3,889.22 418.63
6	Providing and fixing form work for R.C-C. slab of any thickness and only description including assembling dismantling and removal from site in ground floor.	100 Sq.ft. Sq.m.	5,028.61 541.27
7	Providing and fixing form work for R.C.C. beams and lintel of any dimension and any description including assembling, dismantling and removal from site in ground floor (bottom and side faces be measured).	100 Sq.ft. Sq.m.	4,749.03 511.18
8	Providing and fixing form work for R.C.C. balustrade of stairs, balcony, railing, parpet sun breakers, hanging purdi and eave boards etc. of any thickness and any description including assembling, dismantling and removal from site in ground floor (all faces to be measured) .	100 Sq.ft. Sq.m.	3,797.01 408.71
9	Providing and fixing form work for R.C.C. stair and landing etc. of any dimension or any description including assembling, dismantling and removal from site in ground floor .	100 Sq.ft. Sq.m.	8,802.74 947.52
10	Extra for form work plain or reinforced cement concrete of any description in first floor in items 1 to 9 .	100 Sq.ft. Sq.m.	499.38 53.75

FORM-WORK AND LABOUR RATES FPR CONCRETING
SUB-HEAD CODE 128

S. No.	Description	Unit	Rate in Rs.
11	Extra for form work plain or reinforced cement concrete of any description in every additional floor above floor in items 1 to 9.	100 Sq.ft. Sq.m.	368.75 39.69
12	Deduct for form work for plain or reinforced cement concrete of any description in foundation and plinth on items 1 to 9 .	100 Sq.ft. Sq.m.	406.25 43.73
13	Labour rate for concreting plain or reinforced cement concrete walls of any thickness and any description in superstructure including curing the concrete for the specified period etc. in ground floor .	100 Cft. Cu.m.	8,609.38 3,042.18
14	Labour rate for concreting plain or reinforced cement concrete pillars and columns arches, architraves, coping and cornice of any description in superstructure including curing the concrete for the specified period etc. in ground floor.	100 Cft. Cu.m.	10,262.50 3,626.33
15	Labour rate for concreting plain or reinforced cement concrete step of any description including curing the concrete for the specified period etc. in foundation and plinth .	100 Cft. Cu.m.	8,000.00 2,826.86
16	Labour rate for concreting plain or reinforced cement concrete slab of any thickness and of any description in superstructure Including curing the concrete for the specified period etc. in ground floor.	100 Cft. Cu.m.	9,965.00 3,521.20
17	Labour rate for concreting plain or reinforced cement concrete beam or lintel of any description and of any dimension in superstructure including curing the concrete for the specified period etc. in ground floor.	100 Cft. Cu.m.	11,150.00 3,939.93
18	Labour rate for concreting RCC ballustrade of stair, balcony, railing, parapet, sun breakers, hanging purdi and eave boards of any thickness and of any description including' curing the concrete for the specified period etc. in ground floor.	100 Cft. Cu.m.	10,203.13 3,605.34
19	Labour rate for concreting RCC stairs and landing of any description in superstructure including curing the concrete for the specified period etc. in ground floor.	100 Cft. Cu.m.	18,780.63 6,636.26
20	Extra for concreting plain or reinforced cement concrete work of any description in first floor over item Nos. 13,14 and 16 to 19.	100 Cft. Cu.m.	2,703.13 955.17
21	Extra for concreting plain or reinforced cement concrete work of any description for every additional floor above first floor over ftem Nos. 13, 14 and 16 to 19 .	100 Cft. Cu.m.	2,109.38 745.36

RATES FOR EXTRA HEIGHT OF ITEMS BEYOND 15 ft. (4.5 M)

Code 129

PAKISTAN PUBLIC WORKS DEPARTMENT

RATES FOR EXTRA HEIGHT OF ITEMS BEYOND 15 FT (4.5 M).

SUB-HEAD CODE 129

S. No.	Description	Unit	Rate in Rs.
	XIII. SH. CEMENT CONCRETE CAST IN SITU IN SUPERSTRUCTURE		
1	Extra for cement concrete works of any description in any floor for every 5 ft. (1.5 m) height or part there of beyond 15 ft. (4.5 m)	100 Cft. Cu.m.	1,908.09 673.84
	XIV- SH.CEMENT CONCRETE SOLID BLOCK MASONRY IN SUPERSTRUCTURE		
2	Extra for cement concrete solid block masonry of any description in any floor for every 5 ft. (1 .5 m) height or part thereof beyond 15 ft. (4.5 m)	100 Cft. Cu.m.	1,908.09 673.84
	XV- SH. CEMENT CONCRETE HOLLOW BLOCK MASONRY		
3	Extra for cement concrete hollow block masonry description in any floor for every 5 ft. (1.5 m) height or part thereof beyond 15 ft. (4.5 m)	100 Cft. Cu.m.	1,908.09 673.84
	XVI- SH. BRICK MASONRY IN SUPER STRUCTURE		
4	Extra for brick masonry of any description in any floor for every 5 ft. (1.5 m) height or part thereof beyond 15 ft. (4.5 m)	100 Cft. Cu.m.	2,086.14 736.71
5	Extra for reinforcement in brick work and glass block work of any description for every 5 ft. (1 .5 m) height or part thereof beyond 15 ft. (4.5 m) over item Nos. 142, 143. 166 to 168.	Cwt. Kg.	122.50 2.41
	XVII- SH. STONE MASONRY		
6	Extra for stone masonry of any description in any floor for every 5 ft. (1.5 m) height or part thereof beyond 15 ft. (4.5 m) over item Nos. 16 to 26 and 29 .	% Cft. Cu.m.	1,908.09 673.84
7	Extra for stone masonry in cornice coping etc. for every 5 ft. (1.5 m) height or part thereof beyond 15 ft. (4.5 m) over item Nos, 27.	100 Rft. Ru.m.	1,041.25 34.16
8	Extra for stone masonry in cornice coping etc. for every 5 ft. (1.5 m) height or part thereof beyond 15 ft.(4.5 m) over item Nos. 28 .	100 Rft. Ru.m.	1,561.88 51.24
	XVIII- SH. REINFORCED CEMENT CONCRETE WORK		
9	Extra for reinforced cement concrete work of any description in any floor for every 5 ft. (1.5 m) height or part thereof beyond 15 ft. (4.5 m) over item Nos. 17 to 91.	100 Cft. Cu.m.	6,782.61 2,395.26
10	Extra for reinforcement of any description in any floor for every 5 ft. (1.5 m) height or part thereof beyond 15 ft. (4.5 m) over item Nos. 166 and 167.	Cwt. Kg.	122.50 2.41

RATES FOR EXTRA HEIGHT OF ITEMS BEYOND 15 FT (4.5 M).

SUB-HEAD CODE 129

S. No.	Description	Unit	Rate in Rs.
11	Extra for **roofing of any description other than RCC** in any floor for every 5 ft. (1.5m) height or part thereof beyond 15 ft. (4.5 m) over item Nos. 1 to 10 and 35 to 37.	100 Sq.ft. Sq.m.	387.50 41.71
12	Extra for ridges, valleys, gutters, barge boards etc. of any description for every 5 ft. (1 .5 m) height or part thereof beyond 15 ft. (4.5 m) over item Nos. 11 to 23 and 27 to 34..	Rft. Ru.m.	10.92 35.82
13	Extra for ceiling of any description in any floor for every 5 ft. (1.5 m) height or part thereof beyond 15 ft. (4.5 m) over item Nos. 40 to 43 and 46 to 50	100 Sq.ft. Sq.m.	1,187.50 127.82
	XXIII- SH. IRON STEEL & ALUMINIUM WORK		
14	Extra for iron work of any description in any floor for every 5 ft. (1.5 m) height or part thereof beyond 15 ft.(4.5 m) over item Noa. 37 to 42 .	Cwt. Kg.	51.21 1.01
15	Extra for **ceiling plaster** of any description in any floor for every 5 ft. (1.5 m) height or part thereof beyond 15 ft. (4.5 m) over item Nos. 1,2 and 59 to 81	100 Sq.ft. Sq.m.	1,976.98 212.80
16	Extra for **wall plaster or pointing** of any description in any floor for every 5 ft. (1.5 m) height or part thereof beyond 15 ft. (4.5 m) over item Nos. 3 to 24, 44 to 49, 52 to 73, 75, 84 to 86, 99 to 101, 104 to 106, 109 to 112, 115 to 117, 120 to 122, 125 to 128, 131 to 133, 136 to 138, 141 to 144	100 Sq.ft. Sq.m.	837.01 90.10
17	Extra for **colourcrete, snowcrete** etc. of any description including base work in any floor for every 5 ft. (1.5 m) height or part thereof beyond 15 ft. (4.5 m) over item Nos. 76 to 81 .	100 Sq.ft. Sq.m.	1,426.30 153.53
	XXVII- SH. DISMANTLING AND DEMOLISHING		
18	Extra for dismantling masonry plain CC or RCC work of any description in any floor for every 5 ft. (1.5 m) height or part thereof beyond 15 ft. (4.5 m) over item Nos. 1 to 13, 15,16 and 60 .	100 Cft. Cu.m.	589.89 208.32
19	Extra for dismantling roofing of any description other than RCC in any floor for every 5 ft. (1.5 m) height or part thereof beyond 15 ft. (4.5 m) over item Nos. 21 to 27 .	100 Sq.ft. Sq.m.	298.20 105.31
20	Extra for dismantling ceiling of any description in any floor for every 5 ft. (1.5 m) height or part thereof beyond 15 ft. (4.5 m) over item Nos. 28, 29 and 32.	100 Sq.ft. Sq.m.	296.88 31.96
21	Extra for dismantling iron work of any description in any floor for every 5 ft. (1.5 m) height or part thereof beyond 15 ft. (4.5 m) over item Nos. 30, 57 and 58.	Cwt. Kg.	123.50 2.43

RATES FOR EXTRA HEIGHT OF ITEMS BEYOND 15 FT (4.5 M).

SUB-HEAD CODE 129

S. No.	Description	Unit	Rate in Rs.
22	Extra for dismantling wood work such as trusses, rafters, battens, beams, purlins etc. of any description in any floor for every 5 ft. (1 .5 m) height or part thereof beyond 15 ft (4.5 m) over item Nos. 52 .	100 Cft. Cu.m.	403.75 142.58
	XXIX- SH. MAINTENANCE		
23	Extra for crack repairs in roof of any description in any floor for every 5 ft. (1.5 m) height or part thereof beyond 15 ft. (4.5 m) over item Nos. 1 to 5	100 Rft. Ru.m.	378.13 12.41
24	Extra for patch plastering, scraping, cleaning, rubbing, applying renewal coat on old finishing items of any description in walls in any floor for every 5 ft. (1.5 m) height or part thereof beyond 15 ft. (4.5 m) over item Nos. 28 to 49	100 Sq.ft. Sq.m.	310.63 33.44
	XXXII- SH. FORM WORK AND LABOUR RATE FOR CONCRETING		
25	Extra for form work for plain or reinforced cement concrete work of any description for every 5 ft. (1.5 m) height or part thereof beyond 15 ft. (4.5 m)	100 Sq.ft. Sq.m.	203.13 6.66
26	Extra in labour rate for concreting in all types of plain or reinforced cement concrete work in superstructure for every 5 ft. (1.5 m) height or part thereof beyond 15 ft. (4.5 m)	100 Cft. Cu.m.	1,081.25 381.84

PART - I
PUBLIC HEALTH INSTALLATIONS

PART - II
SPECIFICATIONS

SPECIFICATIONS FOR SANITATION WORKS

All Drainage and House Sanitation works shall be carried out in a manner complying in all respects with the requirements of the relevant byelaws of the Karachi Municipal Corporation or of the Local Body in whose area the work is situated.

Note:—Except with the permission in writing of the sanctioning authority, no change shall be made in the specifications.

LAYING AND JOINTING R. C. C. DRAIN PIPES.

The pipes used will be R. C- C. pipes class ' A', made to Director General Supply & Development specification No. G/W/W-58 unless specified otherwise.' The jointing will be done first with spun yarn rope (dipped in standard mexphalte composition for jointing) filled in the grooves provided in the pipes and the pipes are pressed together. The rope will be 1-1/2 times the dia. of the groove so as to be sufficient to fill in the groove in the other pipe also and make allowance for tightening up. After this, the collar will be slipped on the joint and cement joint with 1:1 mortar will be made between the pipes and the collar and finished off on the outside at an angle of 45 degrees. Proper tools and plants such as jacks and templates will be used for pressing together pipes and making cement joints. In other respects, the R.C.C. pipes will be treated as the S. W. pipes.

TESTING OF DRAINS.

Every drain shall be tested in sections between manholes by water test, in which they are to be filled with water to a 4 ft. head of water above the top of the highest pipe. If it is found that certain pipe joints are leaking the water must be run off and joints recaulked with cement and the drain got retested.

All expenses of testing drains, including the provision of the necessary pumps; temporary bulkheads, funnels, stoppers and other things and also the supply of water for testing are to be borne by the contractor and shall be included in his rate for laying drains.

REFILLING.

Refilling in trenches for drains shall be commenced after the drains have been tested and approved and the concrete has been passed. The refilling on the top and round the drain shall be done with great care and in such manner as will obtain the greatest amount of compactness and solidity possible. For that purpose the earth shall be laid in regular layers not more than 9" thick up to the surfaces and also watered and rammed at each layer.

SHALLOW MANHOLES, TYPE "A"

For depth up to 3-1/2 ft. (measured from the top of C. I. Cover to the invert level of the drain), the internal dimensions of the manholes shall be 2 ft. X 1-1/2 ft. These shall be built on a bed of cement concrete 3'-10" x 3'-4" by 6 inches. All walls shall be 8" thick in C. C. Block Masonry 1:3:6 in cement mortar 1:3. The internal surface shall be provided with ½" thick cement plaster (1:3) all round and fitted with C. I. Cover and frames 16" dia. inside, held in position by reinforced cement concrete LINTEL 4" thick and 3'-10" long by 3'-4" wide.

MANHOLES, TYPE 'B'

The internal size of plain manholes shall be 3' long and 2'-6" wide. These shall be built on a bed of cement concrete 4'-10" by 4'-4" by 6" thick. All walls shall be 8" thick in C. C. Block Masonry 1:3:6 in cement mortar 1:3. The internal surface shall be provided with ½" thick cement plaster (1:3) all round and fitted with l'-6" dia. cast iron cover in R. C. C. lintel at the top. The Cement concrete in R. C. C. lintel to be of 1:2:4 ratio (1 cement, 2 coarse sand, 4 of ¾" stone aggregate). The foot irons in manholes shall be of cast iron of approved design, quality and ¾" thick, in cross section. These shall be fixed 1' apart vertically and staggered laterally and shall not protrude more than 4-1/2" from wall. Benching in all types of manholes shall be of fine cement concrete and of dimensions as specified in the detailed drawings.

MANHOLE, TYPE 'C"

The above particulars as per type "B" shall apply to type ' C' also, except that the lower portion of the walls shall be of 12 inch thickness up to 4 ft. and the rest of the wall of 8" thickness. The 1:3:6 cement concrete bed shall be of 5'-6"X5'-0 and 6" thick,

MANHOLE, TYPE "D".

The particulars specified for types B & C are applicable to type ' D' also. The foundation cement concrete of 1:3:6 proportion shall be 9" thick and 7'-8"X 6'-2" in length and breadth respectively. In addition, the bottom portion of block masonry walls shall be 1'-4" thick to a height of 6 ft., the top portion of 8" thick to a depth of 8 ft. from G. L. and the portion in between shall consist of 12" thick walls. In other respects, also the construction of the manholes shall be strictly as explained on the drawing.

MANHOLE, TYPE "E'.

This type is intended for use on pipe sewers of 18" dia. upto 30" dia. and the foundation cement concrete shall be 7'-8"X7'-2" and 9" thick. The bottom masonry walls shall be 1'-4" thick to a height of 7 ft. and the remaining walls treated as for type ' D '; but in other details, the manhole shall conform strictly to the ' E ' type design drawing.

Each of the various type designs of the manholes is intended for a specified depth and so far as practicable a suitable type shall be adopted. The types and depths are as follows :

Type design A	Maximum depth 3'-6".

„	B	For depth over 3'-6" to 7'-11".
	C	8 ft. to 12 ft. depth.
„ „	D --- --- --- ---	Over 12 ft. to 20 ft. depth on sewer 6" dia. To 15 dia
	E	Over 12ft. to 20 ft. depth for 18" to 30" Pipe sewer

Manholes for greater depth and larger sizes of sewers will have to be designed as required in each case. The size and weight of the cast Iron cover and frame as required in each type design are specified as follows :

Type design A -- -- --	16”	dia Clear opening	1Cwt. 1 Qr.
“ “ B -- -- --	18”	“ “ ‘ “	1 Cwt. 3 Qr.
“ ” C -- -- --	18”	“ “ ‘ “	-- do --
“ ” D -- -- --	20”	“ “ ‘	2 Cwts.
“ ” E -- -- --	20”	“ “ ‘	2 Cwts.

If the manhole happens to be on a main road, the clear opening of the frame shall be 20" dia. and the weight 4 Cwts.

The inside meeting surfaces of the cover and frame shall be of slanting design and the clear opening mentioned above shall be the inside dia. of the frame at the bottom. The cover and frame shall be. given a thick coat of anti-corrosive bitumastic paint. The cover shall be provided with strong lifting arrangements. The cover and frame shall conform to the standard drawings.

HOUSE DRAINAGE.

Material and size: House drains shall be 4" dia. stoneware pipe or made of other materials as mentioned under S. H. Drainage but if they pass through any covered area or inside the house, they shall be 4" dia, C. I. Pipe to B.S.S. No. 78 Class B or B.S.S. 1211/45, Class B or R.C.C. pipe. Cast iron pipe shall be of the plain spigot and socket type jointed with spun yarn packing in half the depth of the jointing space and the rest of the space filled in with molten lead and properly caulked and finished. After test, the pipe shall be encased in cement concrete (1:2:4) 6 inch thick all-round.

GULLY TRAPS

These shall have traps suitable to the situation and fixed as described below: -

Each gully trap shall have one C.I. Grating 6"X6" and one C.I. Cover and frame 12"X12". Gulleys are to be fixed on concrete foundation 1 'ft. square and not less than 4" thick. After fixing and testing Gulleys and branch drain, and after permission has been given to concrete round pipe the level with top edge of gully. A curb in cement concrete 1:3:6 block or brick masonry in 1 : 3 cement mortar about 3" high from the ground level is then to be built round top edge of gully rendered in ½" cement plaster, (1:3) in such a manner that surface water may not be allowed to enter the gully.

Gully traps will be of salt-glazed stoneware, or of cast Iron or of cement concrete as stated in the schedule of items of work.

Note:—House drains and each drain connection from W.C. pan or Gully shall also be put to water test and treated in this respect similar to the pipe work in the main drains as described in Sub-head " DRAINAGE ".

SOIL, WASTE AND VENT PIPES.

Each head of the drain shall be ventilated by means of 4" H.C.I, vent shaft, the height of which shall conform with the current Bye-Laws of the Local Body in whose area the work is situated. These shall have 4" C.I. Guards at terminals and the pipe fixed to the wall with standard 4" holderbat clamps, which on parapet where required will be replaced by iron stays.

ANTISYPHON PIPE

In every case, where two or more W. C. pans situated at the ground floor drain into one soil pipe, antisyphon connection shall be provided to each. These connections shall be connected to an antisyphon pipe stack of not less than 2" dia. which shall be carried up to discharge at a safe point, where it is not likely to cause nuisance.

In the case of W. C. Pans at different floors of a Multistoreyed building connected to one soil stack, every pan shall be provided with an antisyphon connection which is connected to the 2" antisyphon pipe stack. This stack may be connected to the 4" soil pipe stack at a convenient point above the highest W. C. pan or carried up independently to discharge at a safe point, whichever is found to be the cheaper or the more suitable arrangement.

CAST IRON PIPES AND FITTINGES

All C. I. Pipes shall be to the British Standard specification No. 416 (Medium Grade), free from flaw and the interior shall be clean and smooth and painted inside and outside, while hot, with Angus Smith Solution or other approved anticorrosive paint. The spigot end shall abut the shoulder of the socket end and leave no annular space in between.

The fittings made to B.S.S. No. 416 or equivalent shall be accepted. The access doors of fittings shall be of proper design so as not to form cavities in which filth may accumulate. Doors shall be provided with 1/8" rubber insertion packing.

" EVERITE " or other approved makes of asbestos cement soil and waste pipes and fittings will be accepted for use on works, if these are tendered for.

All pipes shall be fixed in perfect vertical and horizontal straight lines with all necessary fittings and they shall be left perfectly water tight. They may be subjected to water or smoke test, if so desired by the Engineer-in-charge.

C. I. Pipes and fittings shall be painted in two coats of white zinc paint of approved quality mixed with pigment to match the colour of the building over a primary coat of red lead to the satisfaction of the Engineer-in-charge.

LEAD CAULKED JOINTS

Terred spun yarn rope as approved by the Engineer shall be used for packing, be properly packed to half the depth of the space in the socket for jointing with caulking tools and the remaining space shall be filled with molten lead, caulked and finished level with the socket.

METHOD OF MEASUREMENT

Method of measurement in case pipe and specials, etc., are separately tendered for:-

1. First measure overall length including pipe and specials, etc., and pay as pipe for the total length at the tendered rate of the pipe.

2. Then count specials, etc., and pay at the tendered rate of these items.

TRAPS

1. FLOOR TRAPS.—These shall be of cast iron and of self cleaning design. The specifications for these shall be the same as for C. I. soil waste and vent pipes. The traps shall be capable of maintaining a minimum water seal of 1-1/2 inches in the case of " Dual pipe " system and 2 inches in the case of " One pipe " system.

2. TRAPS for Lavatory basins, Bath tubs and sinks, etc., shall be of melleable iron, drawn lead or C.P. brass and of tubular type with necessary unions, etc. These shall be capable of maintaining a minimum water seal of ½" inches'in the case of "Dual pipe " system and 3 inches in the case of " One pipe " System.

WATER SERVICES
STORAGE TANKS.

These shall be of 1/8" best quality galvanized iron fixed properly on R. S. Joists of adequate size and painted. The tank shall be strengthened at all angles with angle iron 1-1/4" x 1-1/4" x ¼" Care should be taken, as far as possible to locate tanks so that they may not be visible either from the compound of a bungalow or from the main or service roads. Supply from storage tank shall only be for the water closet cisterns. The net capacity '(STORAGE) shall be at the rate of 60 gallons per seat of W. C. after making allowance for the ball valve. C. I. Mosquito-proof covers and overflow fittings of approved design and requisite size shall be provided which shall discharge at a convenient and suitable point, so that is does not damage the building and does not prove a nuisance, should the tank go out of order.

1-1/2" dia. scour pipe connection shall be made at the bottom with proper flange and shall be treated similarly as the overflow pipe.

The above particulars of cover and pipe connections etc., shall also apply to tanks made of reinforced cement concrete or any other material.

2. G. I. PIPE :—G. I. Pipes shall be of water quality manufactured by a firm of repute and fittings may be either of galvanised wrought iron or galvanised malleable iron. Where pipes have been cut or rethreaded the ends shall be carefully filed out so that no obstruction to the bore is offered. The weight and thickness of various sizes of pipes shall be as laid down in B.B.S. 788-1938 for black pipes plus weight of galvanization.

Bore of pipe in inches	Approx. Wt. in Lbs. per foot of G.I. Pipe
1/2"	0.96
3/4"	1.34

1"	1.94
1-3/4	2.72
1-1/2	3.39
2"	4.29
2-1/2	5.70
3"	6.74
4"	8.80
6"	13.00

3. All G. I. Pipes on the internal or external side of the wall shall be fixed visible (and not in chase) by means of standard pattern holderbat clamps keeping the pipe-1/2" clear of wall every where. When it is imperative to fix the pipe in front of the house or in any conspicuous position where it looks unsightly, chasing will be adopted.

4. G. I. Water pipe laid underground shall be 2 ft. deep from the ground level painted with approved anti-corrosive paint and covered with hessian lagging soaked in mexphalte composition and tied.

5. All G. I. Pipes and storage tanks shall be painted with two coats to match the colour of wall. Storage tanks shall also be painted inside with Bitumastic or other anticorrosive paint.

6. All G. I. Pipes may be tested by the Officer-in-Charge to a pressure of 100 Ibs. per square inch to insure that good threads are cut and proper materials (red lead, paint and hemp) is used in jointing. Care must be taken that all G. I. Pipes are kept free at all times from stoppage or dirt. Pressure testing machine shall be supplied and maintained and test given by the contractor at his own cost.

BRASS & GUN-METAL WATER FITTINGS.

The fittings shall be of strong construction and good finish as made by Messrs: Anwar Mechnical Works Gujranwala and Karachi to the standard specifications noted against each category or by any reputable maker to these specifications.

(A) Brass bib cocks (taps) and stop cocks ... ... B.S.S. No. 1010.

(B) Gun-metalfullway valves ... ... D.S. & D.P.S.D/G-WW/57.

(C) BALL valves ... ... B.S.S. 1212.

(D) Brass ferrule ... ..., J.C.S.W.R. specifications.

(E) Gun-metal non-return valves ... ... D.S. & D. & G/WW/7,

Pillar taps of 1/2" dia. for fixing to lavatory Basins and of ¾" dia. to Baths shall be Shanks' manufacture or of equivalent quality.

SANITARY FITTINGS ETC

Note.—Sanitary pottery, C.I. bath and cisterns and accessories etc., shall preferably be manufactured of firms of repute, namely M/s. Royal Doulton, Twyfords, Shanks and Carron etc., and shall bear their Mark. Any article not coming up to the standard and finish of the above makers shall not be accepted for use in the works. C.I. cisterns made by the Central Mechanical Engineering, Karachi, will be accepted as an equivalent.

EUROPEAN TYPE CLOSETS

The pans shall be of a type readily flushed and of wash-down design. The seats shall be of a design approved by the Engineer-in-Charge. Cisterns shall be of 3 gallons capacity, waste preventing, mosquito proof and of a finish in conformity with the class of building in which it is installed. The inlet to the cistern shall be controlled by a 1/2" ball valve and, in addition a 1/2" stop cock shall be provided on the branch pipe supplying the cistern. Where service pipes are of galvanised iron, a short length of lead pipe, jointed to the iron pipe by suitable unions shall be inserted between the main pipe and the cistern. The flush pipe and operating chain shall be of desings suitable to the particular installation. In residential buildings, the flush cisterns shall be of the silent filling type. Cisterns shall be fitted with 3/4" overflow pipe discharging in visible position. The cistern shall be supported on Rolled steel joist brackets of cantilever design or C. L brackets of cantilever design, both 4 inch built into wall.

Note :—Specifications for the low-down sets for installation in superior class building will be given separately, when these are intended to be installed.

LAVATORY BASIN

This shall be of the slotted pattern approved by the Engineer-in-Charge. It shall be fixed on Rolled Steel Joist or C. I. cantilever brackets 4 inch built into wall and the plaster of the rear wall be cut to overhang the top edge of the basin. The size of basin will be 25"X18" unless other size is asked for, 2 lead connection pipes with wiped soldered joints and 2 controlling stop cocks 1/2" dia. shall be used for controlling water supply to the two chromium plated pillar valves of 1/2" dia. The 1-1/4" malleable iron trap or chromium plated brass " bottle " trap of approved design shall be fixed on the brass waste of the basin and each waste shall have an M. I. Union. The 1/2" dia. waste pipe shall terminate in a gully trap or \floor trap or be connected to the waste pipe stack as required in the circumstances.

Note : Specifications for Pedestal type lavatories for use in the superior class buildings will be given separately, when these are intended to be installed.

EUROPEAN TYPE STALL URINALS

These shall be of white glazed fireclay and of the following dimensions, unless specified otherwise:-

Height from treads to top of Division	4' - 0"
Width centre to centre of Division	2' - 0"

The urinal range shall be provided with automatic flush cistern in white glazed fireclay, of the capacity according to the No. of Stalls to be flushed. The flush pipe and spreader shall be of C. P. Brass. The trap shall be proper C. I. urinal trap 2-1/2" to 3" dia. depending on the No. of stalls in the range and approved by the Engineer-in Charge. For an approved pattern of trap, see Twyfords general catalogue page 255, No. 354 and No. 407.

SINKS.

These shall be of white glazed fireclay and 30" x 18" x 10" in size unless other size is asked for is asked for. The waste pipe and chromium plated brass trap of bottle design shall be 1-1/2" discharging outside in the gully trap, or on floor trap inside or connected to the waste pipe in case of storeys above ground floor. The draining boards of Teakwood shall be of 30" x 18" x 1-1/2" thick planks, battened and braced 1" thick, and with back and side Skirting 4" high. The sink and draining boards shall be supported on R.S or C.I. Cantilever brackets of approved design and suitable size, 6" built into wall. The boards shall be of other sizes if such are required.

BATHS.

These shall be of cast iron porcelain enameled inside. The outside shall be painted as desired by the Engineer in Charge. The general size, unless other wise ordered, shall be :-

Length	6' - 0"
Width	2' - 6"
Height	1'-11"

The bath shall be provided with 1-1/2" trap, overflow and antisyphon arrangements and connected to the waste stack on the outside wall. Waste water may be allowed to discharge over floor trap, if so desired by the Engineer-in-Charge. 'The bath shall be fitted with 2 C. P. Pillar cocks ¾" and C. P. Chain with a plug. 2 Control cocks ¾" shall be provided with each bath.

Note : —Specifications for the built in type of baths for use in the superior building will be given separately, when these are intended to be installed.

SQUATTING TYPE W. Cs.

The pan shall be of white glazed earthen ware of not less than 18" long inside clear opening (between flush rim) fitted with 4" dia cast iron trap with 2" vent arm if required. Those intended to be fixed in Bungalow and Superior Class Buildings shall be of white Vitreous China with integral foot treads and of approved quality and size.

The pan shall be provided with a 3 Gallons C. I. Cisterns, of mosquito proof and waste-preventing design complete with ½" ball valve and ½" lead connection with stop cock. The pull shall be strong C. P. Brass chains with pottery handles. For servants, strong G. I. Chains and Pulls would be required. The cistern shall be fixed on suitable and standard pattern R. S. Cantilever brackets or C. I. Cantilever brackets 4 inches built into wall.

The pan shall generally be of the design with the flushing arm in the front, unless ordered otherwise, when the cistern cannot be conveniently accommodated in the W.C.

apartment. The pan outlet making joint with the trap shall be of the design without shoulder or collar so as to make a sound joint possible with the trap.

The pan shall be sunk in floor sloped towards the pan. A step up platform in cement concrete shall be provided for W. Cs. in upper floors, and platforms with white marble chip layer, in Bungalows, etc., on all floors where such flooring is specified.

Note :—White glazed earthenware foot tread of the required finish and design and 12" x 6" in size shall be provided to pans not manufactured with integral tread. If these are not available, foot treads (in fine cement concrete, (1:2:4) with 3/4 inch stone ballast and ½" dia. semicircular grooves cut in diagonally both ways and finished with 1/2" cement plaster (1:3) with 1/4 inch cement floating coat on all surfaces) shall be provided.

WATER SUPPLY MAINS.

(a) Unless otherwise stated, all water mains over 2" dia., are to be of cast iron The cast iron pipes and specials are to be in accordance with the latest British Standard Specifications, as may be specified for the work. R. C. C. pipes of the required strength as specified may be used, Standard C. I. specials cannot be fitted with R. C. C. Pipes of the specified class. C. I. specials shall therefore be provided with sockets of such dimension that the annular space for making joint shall be f inch (approx) to the whole depth of the jointing space.

(b) The cast iron pipes and specials are to be laid to proper gradients and the centre lines are to be straight or curved to proper radii. All unnecessary bends either in the vertical or horizontal direction are to be avoided. Every pipe must have a solid bearing throughout. Joint holes must be got out large enough to make the joint both at the sides and under the pipes, and these holes must be included in the price tendered per foot laying. Before being laid, each pipe is to be examined and tested to prove its soundness, then cleaned of all dirt, soil or stones and then placed in position.

(c) The socket and spigot joints are to be made by driving home spun yarn (to fill half the depth of the jointing space in the socket) treated as specified in clause 'D ' below, and pouring in the rest molten lead at one filling so as to fill up the socket and leave a projection for caulking. The joint is to be well caulked so as to be sound and water-tight, evenly set up and left flush and clean.

(d) All spun yarn, used for pipe jointing is to be stored on clean racks in godown with a pucca floor and is to be kept covered with clean sacking until required for use.

All spun yarn used for pipe jointing is to be carefully cut to the length required for each ring of jointing, according to the diameter of the pipe and the joint to be made. This is to be done on a clean bench which previously been washed down is to be free from all dirt and dust.

(e) R. C. C, PIPES made to D. G. S. & D. specification No. G/W/W-58. These will be of class B or Class C as required depending on the pressure head which they are intended to stand to. The method of jointing, as described below, is the same for both the classes of the pipes, while specifications for laying are the same as for laying C. I. Pipes described as under (b) before.

The jointing will be done first with spun yarn rope (dipped in standard mexphalte composition for jointing) filled in the grooves provided in the pipes and then pipes are pressed together. The rope will be 1-1/2" times the dia. of the grooves so as to be sufficient to fill in the groove of the other pipe also and to make allowance for ' tightening up. After this, the collar will be slipped on the joint and then cement joint with 1 : 1 mortar will be made between the pipes and the collar finished off on the outside at an angle of 45 degrees. Proper tools and plants, such as Jacks and templates, etc., will be employed for pressing together pipes and making cement joints.

(f) The mains when completed are to be tested in sections as may be directed by the Officer-in-Charge by pumping water into them up to a pressure equal to the standard test pressure (not working pressure) specified for the class of pipe laid. This pressure is to be maintained for 1/2 hour without additional water being pumped, the contractor supplying at his own cost the water and all necessary gauges, force pumps, stopped ends and cap. If the mains and pipes are unable to stand the test, the contractor must repair the leaks etc., until they can do so.

SLUICE VALVES.

The sluice valves are to be of cast iron and to have 4 gun metal faces and removeable seats and are also to have machine cut gun-metal screws. They are to work easily and smoothly under all conditions and are to be water-tight when closed under a head of 200 feet or such greater head as may be specified.

MEDICAL TEST OF WATER

After the mains have passed the pressure tests, they shall be thoroughly scoured out ; and further to ensure that the pipe system is free from injurious matter it shall be filled with Solution of bleaching powder (Calcium Hypochlorite) or of Permanganate of Potash and allowed to remain so for 24 hours. After the period, the system shall again be scoured out and filled with the water of the supply main. Samples of water shall be taken to the Government Provincial Laboratory for medical test. The contractor shall provide the chemicals, etc., and make the necessary arrangement for these operations. He shall produce the report signed by the competent Medical or Health authority that the water is fit for human consumption. Should the report be not satisfactory the operation shall be repeated again and again till a satisfactory report is obtained.

The contractor should include in his rates of pipe-laying all the expenses to be incurred in connection with the chemicals and medical test and other operations described in this sub-head.

Method of measurement in case pipe, specials and fittings, etc., are separately tendered for : -

(1) First measure overall length including pipe, specials and fittings and pay as pipe for the total length @ the tendered rate of the pipe.

(2) Then, count specials and fittings, etc., and pay at the tendered rate of these items.

uPVC PRESSURE PIPE FOR WATER SUPPLY

(Specifications)

1. i) uPVC (Unplatisized polyvinyl) chloride pipes manufactured in accordance with PS 3051:1991 & BS 3505 shall be used for portable cold water supply system.

ii) uPVC pipes are manufactured in B.C.D. & E classes respectively designed and manufactured for different working pressures (Table 1 & 2). Pipes from 75 mm to 150 mm diameter are manufactured in B.C.D. & E classes whereas, pipe of 50 mm & 65 mm diameter are manufactured in C.D & E classes. Pipes of diameter 32 mm & 40 mm are manufactured in D & E classes. Pipes of diameter 20 mm & 25 mm are manufactured in E class only.

2. uPVC fitting shall be used with pipes, long radius bends and sockets shall be fabricated fittings whereas all remaining fittings shell be injection mould i.e. equal tees, elbows 45/90, male/female vol sockets, end plugs etc.

3. **Jointing Systems 0000**

For diameter 75 mm, 100 mm & 150 mm Z-joint with rubber rings shall be used. For diameter 20 mm to 65 mm cement solvent joint shall be used.

4.

Table-1

MAXIMUM SUSTAINED WORKING & FIELD TEST PRESSURES:

	WORKING PRESSURE			TEST PRESSURE		
Class	Bar	Kgs/Cm²	lbs/in²	Bar	Kgs/Cm²	lbs/in²
B	6	6.12	87	9	9.18	130
C	9	9.18	130	14	13.77	195
D	12	12.25	173	18	18.38	259
E	15	15.30	217	23	22.95	325

Note:- The maximum admissible service pressures are calculated from known data on the basis of a life of at least 50 years of continuous operation and a safety factor greater than 2.

6. **Weights:-**

BS 3505 does not spell out any figures for weights. The pipe weights are dependent on the formulation, density and tolerance. Approximately weights for Dadex uPVC pipes for transportation and other estimation purpose are given in the table below.

APPROXIMATE WEIGHTS FOR uPVC PIPE PER METER

Normal Size mm	Class-B Kg/m	Class-C Kg/m	Class-D Kg/m	Class-E Kg/m
20	---	---	--	0.22
25	---	---	--	0.32
32	---	---	0.41	0.50
40	---	---	0.54	0.65
50	---	0.68	0.82	1.03
75	1.17	1.41	1.82	2.22
100	1.78	2.32	3.03	3.65
150	3.46	5.01	6.57	7.95

6. **Pressure Fittings:-**

a) A wide range of fabricated and injection molded fittings available with Dadex, are designed to make service pipe connections economical, durable, leak proof, easy and quick.

b) These fittings include couplers/sockets, elbows (90)°, tees threaded adapters (male/female), end caps, flanges, saddles, bends (45°, 90°) and reducer available in various sizes for different classes of pipes.

7. **Pressure Jointing Systems:-**

The following jointing systems are available.

a) Solvent Cement Joint.
b) Z-Joint.

8. **Solvent Cement Jointing Systems – Procedure Typical:-**

a) Chamfer the pipe end at an angle of 15° to 20° to an extent 0.75 mm length.

b) Remove the dust and burr from the pipe ends and fittings using dry rag and thoroughly clean with the cleaner.

c) Spread solvent cement thinly and evenly over spigot end and inside of socket.

d) Assemble within 40 seconds.

e) Hold together for 3—5 minutes.

f) Wipe all excessive adhesive.

g) Leave for 24 hours before pressure testing.

Notes:- i) Excessive use of solvent cement could lead to weakening the pipe wall by solvent action

ii) The tools required for solvent cement jointing comprise of cutting tool, rags knife or half round coarse file, natural bristle, primer, application can, lubricant, solvent cement and tool tray.

9. **Joint Jointing System:-**

Z-joint was developed by Waving and since its inception has become one of the well known integral joins for uPVC pressure pipes in the world. The Z-joint possesses the following sealing mechanism and is presently manufactured by Dadex.

i) Due to cavity between the lip and the body of the sealing element, the internal water pressure pushes the body of the ring into the groove and the lip to the inside diameter of the pipe thus giving an excellent sealing.

ii) The gap between the groove and the body of the rubber rings is small because their profiles match.

iii) The contact surface between the ring and the inside of the pipe diameter is relatively large because of the lip's length.
(Z-joints and other lip sealing rings are normally loose components of the joint).

10. Procedure For Z-Joint Installations:-

i) Carefully clean the socket, groove, rubber ring and beveled spigot end until they are completely dry and free of dirt. This is extremely important for the correct positioning of the rubber ring during assembly.
ii) Press the rubber ring into a heart shape and fit carefully into the groove, pushing it firmly in as far as it goes all the way round. The opening in the rubber ring must face backwards.
iii) Apply lubricant generously to the beveled spigot end and a little to tront edge of the rubber ring. Ensure that no lubricant penetrates behind the rubber ring.
i) Press the spigot end into the socket, rotating gently to align the chamfer with the rubber ring. Do not insert the spigot at an angle.
ii) Stop at the entry (13-25 mm) from the end of the socket to cater for potential expansion and contraction.
iii) Make sure that the pipes to be jointed are aligned correctly against each other.

11. Marking:-

Dadex pipes are typically marked in dark blue colour at one meter intervals as shown below.
"DADEX Eternit PVC-u BS 3505 4" inch dia 6 Bar Class "B" 1-1990-6-7".

12. Transportation and Storage:-

i) Dadex pipes and fitting should be loaded on to the truck in such a manner that they are not damaged during transportation. Pipes should be supported along their length, leaving the sockets open. Impact type stresses on uPVC pipes and fittings should be avoided, especially at temperature near freezing point and below. They should be protected from contact with substances (solvents, tar, paint, fuels, etc), injurious to PVC.
ii) Pipes should be loaded on the vehicle in such a way that the overhang is not more than 1m. Thick walled pipes should always be loaded before the thin walled pipes.
iii) In no case pipes should be dragged along the ground.
iv) In storage, it is important that no unacceptable deformation or damage is caused. Stack height should not exceed 1.0m for bundle pack and 1.5m for loose pipes.
v) Protect pipes and fittings from sun light. Where so ever, sheds are not available then use air permeable tarpaulins.
vi) Rubber sealing rings should be kept cool and under cover. Solvent cement and cleaner should also be stored in a cool dry place.

13. Installation Procedure – Pipe Trench:-

- i) The depth of trench should be such that the pipe and fittings can be conveniently laid with a cover of 1.0-1.8m according to the design, climate and soil conditions.
- ii) If the ground is rocky then the depth of trench should be increased by at least 0.15m and the excavated earth replaced by a stone free layer.
- iii) In case of descending gradients the stone free layer must prevented from being washed away by concrete or clay stopper. Drainage might also be advisable.
- iv) In case of changing layers and consequently changing soil bearing capacity of the trench bottom, provide and adequate fine gravel or sand filling (approximately 10 x dia) at the points of transition. Should there be a parallel running or crossing of other pipes conveying warm fluids, then care must be taken that the Upvc pipe surface temperature does not rise above 20° C.

14. Pipe Laying / Installation:-

- i) Small diameter pipes could easily be handled without use of auxiliary tools.
- ii) When connecting bigger diameter pipes, the use of a bar to push them into position is recommended.

Note:- When applying force to pipe ends protect with a wooden block.

- iii) After installation, backfill the pipe line between the joint in order to stabilize the pipes before pressure testing is carried out. End plugs should also be anchored before pressure testing. In addition, anchoring or barring should be carried out at bends and tees, if necessary.

15. Pressure Testing:-

It is recommended to test the pipe line in accordance with the prescribed code of practice. Normally, the leakage may occur at the rubber ring joints. As such, the back filling of joints should only be done after testing the pipe line.

16. Preparations for Testing:-

(After the pipeline is installed according to the applicable norms)

- i) The pipe line is burried/anchored at specified places prior to pressure testing.
- ii) Air-relief valves should be provided at higher points.
- iii) Start filling the pipe line from the lowest point.

iv) Open the air-relief valves during filling of water.
v) Water filling speed should be 7 hours for 1 km line irrespective of the pipe diameter.
vi) Pressure testing to be carried out after 48 hours of back filling.
vii) Prior to testing the pipe line should be filled with water for 2 hours.
viii) The temperature of water used for testing should be 20° C.
ix) If the pipe system is a large one, it should be tested in sections of maximum 500mm.

17. Procedure for Testing:-

i) The testing pressure is raised to the nominal or working pressure either by manually operated pump or a power driven pump. This pressure is maintained for 2 hours during which any loss of water is supplemented.
ii) Within 6 minutes thereafter, the pressure is increased to 1.5 times, of the working pressure. This pressure is maintained for 2 hours once again by supplementing any loss of water.
iii) Within 6 minutes thereafter, the pressure is reduced back to the normal working pressure and retained for one hour.
iv) In case, the quantity of water added during this period is below the approximate limits as shown in table 5, the pipe line is acceptable.
v) If the quantity of water lost exceeds the values given in table, or the amount calculated by the following formula:

1 gallon per mile or pipe inch of nominal bore, per 100 ft head of test pressure for 24 hours (4.5 litres/1.6 Km of pipe/25m of nominal bore/30m head of test pressure/24 hours)

vi) If there is leakage in the line that must be investigated and rectified.

Table – 5

Dia (approx) mm	89	114	140	168	219	244	273	324	406	508	610
Lit/Km (Approx)	1	1.2	1.9	2.2	3.6	4.1	4.8	5.1	7.2	9.2	11.6

18. Back-Filling:-

i) After pressure testing, filling of the trench is to be done in layers of 0.30m over the pipe, utilizing stone free soil. The soil layer immediately over the pipe is to be compacted by the tamping bars.
ii) The material used for upper layers can be coarser than used for the initial back fill. These layers should be carefully rammed down one on top of the other until the back fill is completed.

FOOD GRADE WATER TANKS

1. The same should be made of food grade materials, approved by food and drug agency USA.
2. It should be Weather proofed.
3. It should be Seamless construction & completely leak proofed and without any joint.
4. The surface of the tank should be stain, smooth easy to clean, so the water stored in the same remained Hygienic, germ free, odourless , algae free.
5. It should be strong but light in weight, so mobilized easily from place to place.
6. The tank should be installed on leveled surface/platform.

EXCAVATION:- CONCRETE, ETC, AND OTHER MISCELLANEOUS ITEMS OF WORK

EXCAVATION

The excavation shall be taken out truly to the line and levels shown on the plans and sections and of the necessary widths for each type of sewers. In forming the trenches they shall be cut out so that the bottom have regular beds and no filling in with loose soil shall be permitted.

The trenches after being excavated shall be inspected and passed by the Executive Engineer before any further work is commenced, or the contractor will be liable to have his work removed for inspection. Should the excavation be taken out deeper than ordered, concrete shall be used for filling in the extra depth and no extra payment will be made for this concrete. A space of 3' width on the top on both sides of the trench shall be left clear for stacking materials and inspection purposes.

The rate will include all lifts (except in cases where the lift is definitely specified in the Schedule of Quantities).

When rock has to be excavated, the lower surface of the trenches shall be made as level and true as possible in accordance with the plans and instructions. Filling in with crushed aggregate of any pockets or other trifling inequalities which it might be difficult or expensive to level shall be done only after the pockets have been measured and the measurements signed by the contractor in taken of his acceptance. In the event of any dispute regarding the volume of the pockets the decision of the Executive Engineer shall be binding and final.

Back filling of trenches shall be done in approved manner, space must be cleared of all loose debris and filled with good earth all clods being broken. The filling shall be done in 6 inches layers, each layer being well watered and rammed.

The contractor shall dispose of excavated surplus material in an approved manner. Executive Engineer may direct the contractor to fill surplus earth in depressions at site of work. Such filling, if required, shall be done by the contractor in 9 inches layers each layer being well watered, rammed and well compacted. No payment will be made for this unless otherwise specified. For the purpose of this parasite of work means an area of land up to 100 feet all-round the site of work.

EARTH FILLING

The earth of filling must be free from all vegetable alkali, and other foreign matter. Earth which contains a high percentage of salt (particularly sulphates) will not be used in filling.

Only such portion of the excavated material which conforms with the above specifications may be used in filling.

The filling is to be done in 6 inches layers, each layer being watered and rammed to the satisfaction of the Executive Engineer. If filling is not done in layers and or Executive Engineer is not satisfied that each layer has been consolidated he may direct the filling to be removed and redone.

Unless separately provided in the Schedule of Quantities the contractor's tendered rate for each filling should include the cont of bringing from approved sites such quantities of earth, from approved areas, as may be required in addition to approved portions of excavated material allowed to be used in filling.

TIMBERING

In deep excavations, or in bad ground, the sides of the excavations must be securely timbered by experienced timbermen. The greatest care is to be taken in timbering. Any slip into the Excavation is to be cleared out and the disturbed ground cut into benchings and filled with concrete or other material as the Executive Engineer may direct, at the expense of the contractor. Any road surface disturbed by slip is to be restored to the condition in which it was before the work commenced, at the expense of the contractor. In filling excavations only as much timbering is removed as can be done with safety and, unless the work is so situated that settlement is of no importance, it is almost as essential that the ground should be secured during refilling as during excavation. The cost of timbering is to be included in the rates of excavation. The contractor shall also include in all cases in his rates for excavation the cost of pumping or otherwise removing any water which may during the continuance of the contract finds its way into the cutting excavations, foundations, or any parts of the work. No extra will be paid under any circumstances for the removal or pumping of water sullage or drainage of any sort whether such water comes from rain falling directly into the excavation, surface or sub-soil water, or from any source what should slip take place through the rise and fall of sub-soil water level owing to contractor's failure to carry on pumping continually until the work has been raised above water level and allowed to set sufficiently, the contractor will have to bear the cost of re-fixing the timbering and removing earth which has slipped into the trench together with the reinstatement and making good of any foundation or structure affected by any such slip or subsidence, by such methods and with such materials as the Executive Engineer may direct.

The contractor should include in his rates of pipe-laying all the expenses to be incurred in connection with the chemicals and medical test and other operations described in this sub-head.

Method of measurement in case pipe, specials and fittings, etc., are separately tendered for:-

1. First measure overall length including pipe, specials and fittings and pay as pipe for the total length @ the tendered rate of the pipe.
2. Then, count specials and fittings, etc., and pay at the tendered rate of these items.

CEMENT CONCRETE IN FOUNDATION

(1:3:6 Cement Concrete)

MATERIAL – (a) Aggregate. _ The aggregate shall be broken stone ballast or gravel obtained from approved quarries, ranging in size from 2 inches down to 3/16 inch. The broken stone shall be free from injurious amounts of soft, friable, thin, elongated or laminated pieces and shall be roughly cubical in shape. The aggregate shall be free from clay or loamy admixture or any vegetable, alkali or other organic matter. The aggregate shall be graded from 2 inches down to 3/16 inches. The whole of material shall pass 2" sieve and shall be retained on 3/16 inch sieve.

(b) Sand - The sand shall be clean, coarse, sharp, and obtained from approved quarries. The sand shall in general be up to the quality of sand obtained from Malir/Lawrenecepur quarries. It shall be free from all dirt, organic and other injurious matte. The contractor will be required to screen and or wash the sand to remove any foreign matter in it. The sand shall be graded down from Taylor Sieve No. 4 (3/16 inch) to Taylor Sieve No.100 in an approved manner.

(c) Cement. – The cement shall be issued to the contractor at specified issue rates. The contractor shall pay all freight, loading, and carriage, unloading, storage charges, etc. In using cement, the quantity shall be determined on the basis of weight, a bag weighing 1-Cwt. Being taken as 1.2 cubic feet and a bag weighing 5/6 Cwt. Being taken as one cubic foot. The contractor will be responsible for the storage of cement by providing rain-proof and well ventilated sheds having block or stone platform 9 inches above the ground level. If the cement is damaged and become 1umpy due to defective storage or exposure to the weather, such cement shall be removed by the contractor from the site of work within twenty four hours of the receipt of instruction from the Engineer-in-Charge.

2. PROPORTIONS. – The unit of measure shall be one bag of cement. The standard proportioning of this class of concrete if a bag of one cubic foot is used shall be:-

Cement	One part (1.00 Cubic feet)
Sand	Three parts (3.0 Cubic feet)
Stone ballast aggregate	Six parts (6 Cubic feet)

When a bag of 1:2 cubic feet is used the standard proportioning shall be:

Cement	One part (1.2 Cubic feet)
Sand	Three parts (3.6 Cubic feet)
Stone ballast aggregate	Six parts (7.2 Cubic feet)

3. MIXING. – The mixing shall be done in mechanical mixers. The proportions of the ingredients having been specified as above, measuring boxes of the suitable dimensions shall be fabricated. The cement content of each mix shall be by weight and not by volume.

The contractor will be required to mark a can of four gallons in eight parts indicating half gallon each. The Engineer-in-charge will specify the amount of water to be added per a of cement and this shall be strictly adhered to till any change is specified by the Engineer-in-incharge.

4. LAYING. –The concrete must always be used when quite fresh. It shall be laid gently and uniformly in layers not exceeding 6 inches in thickness. The concrete shall not be heaped in one position and allowed to flow by gravity. Each layer shall be thoroughly rammed and the concrete of the succeeding layer shall be immediately deposited over it. All the layers forming the required both of concrete shall be deposited and consolidated within half an hour of he mixing of concrete so as not to disturb it after the initial set has commenced. The concrete will be

consolidated with iron rammers until a little of the mortar creams up to the surface. The contractor shall use square rammers for consolidating the edges. The surface of the concrete after it has been fully consolidated and initially set shall be kept damp. The filling of the foundation with concrete shall preferably be completed in one operation for the whole building. If, however, concreting has to be sopped it must e done at predetermined positions in a manner approved by the Engineer-in-charge.

1:3:6 CEMENT CONCRETE BLOCK MASONRY

1. MATERIAL. – Coarse aggregate. – The coarse aggregate for the cement concrete shall be gravel obtained by screening the usual mixture of gravel and sand locally known as bajri. The contractor shall screen the bajri. The contractor shall screen the bajri through ¾" and 3/16" sieves as many times as maybe necessary to obtain such material as shall pass 100% through ¾" sieve and shall all be retained on the 3/16" sieve. If compact block moulding and vibrating machines are used the grading of the material shall be as specified by the makers if not specified by he maker as found satisfactory by the Engineer-in-Charge for the particular type of machine in use. The Engineer-in-charge shall test representative sample for the aggregate collected by the contractor at the site from time to time and if this sample does not conform with the above grading the entire gravel collected by the contractor will be liable to be rejected.

The gravel shall be free from soft, friable, porous flaky, elongated or laminated pieces. The gravel must also be free from dirt, silt, clay shale, alkali, or organic matter. It shall be sufficiently strong to utilize the full strength of cementing material.

2. Sand – As specified for `1:3:6 cement concrete for foundation.

3. Cement – As specified for 1:3:6 cement concrete.

4. Proportioning. – The unit or measure shall be one bag of cement, the standard proportioning for block of 1:3:6 cement concrete, if a bag of one Cft, is used shall be:-

Cement –1 part (1 Cft); Sand –3 parts (3 Cft) Gravel – 6 parts (6 Cft)

If a bag of 1.2 Cft, is used the standard proportioning shall be:-

Cement 1 part (1.2 Cft)
Sand 3 parts (3.6 Cft)
Gravel aggregate 6 parts (7.2 Cft)

The cement must on no account be measured volumetrically. The water will be measured in four gallon kerosene oil tin which should have sub-divisions reading up to ½ Gallon clearly marked on its inside with white paint. The slump will be specified and intimated to the contractor by the Engineer-in-Charge and the contractor will have to maintain the specified slump throughout.

5. Mixing. – The mixing shall be done in approved mechanical mixers of which the rates capacity for this class of concrete shall not be less than 10/7 cubic feet (10 cft) total dry material, i.e, sum of volumes of aggregates and cement and Cft, mixed concrete for 1 cubic foot bag batch, and 14/10 for 1.2 cubic feet bag match.

After all the material is loaded into the drum, the concrete shall be mixed until it is uniform in colour and consistency but for not less than 1½ minutes. Every effort shall be made to control the speed of rotation, to conform to the manufacturer's re-commendations. No more concrete shall be mixed than can be used before the initial set has been commenced.

Should the contractor fail to make arrangements for the requisite number of the mixers, necessary to maintain the desired progress, he will be allowed to hand mix the concrete in the manner specified for cement concrete, but he will have to use 10% additional cement than specified above under the Sub-head proportioning i.e., instead of a bag of 1 Cft 1.1 Cft and instead 1.2 Cft bag 1.32 Cft of cement will be used. It should be noted that cement is not to be measured but weighed to get the required volumetric quantities. 1 Cwt of cement being as 1.2 Cft No extra payment for this excess 10% will be made.

BLOCK MOULDING

The forms shall be of steel fabricated. These should be true to dimension. The internal dimensions of these forms for the various sizes of blocks shall be such that the finished blocks can be conveniently handled by a labourer and also such that header and stretcher courses similar to brick work can be laid for all walls of greater than 6 inches thickness and the height of any coarse (for any thickness of wall) does not exceed 6 inches. The forms shall be so fabricated that they retain their true shape throughout the period of their use.

The finished block shall be true to shape i.e., every face shall be a perfect rectangle exactly parallel to the opposite face and exactly perpendicular to the adjoining faces. Blocks with broken edges or which are skew will not be allowed to be used on the work and must be removed from the site of work within 24 hours of their being rejected.

After 2 days in the case of machine moulded blocks and 3 days in the case of manually moulded blocks hey may be removed and stacked to not more than 3 feet height. The block stacks are to be kept wet for a period of 10 days. The blocks will be allowed to dry for 10 days after curing before being used on the work. The blocks cast on different dates must be separately stacked; the date of casting proportion and number of block in each stack being clearly indicated by writing on a “T” to be erected in the ground near the stack.

Proportion of mortar. – The sand for the mortar shall be that ob tainted from Malier/ Lawrenecepur quarries. The material passing 3/16 inch, sieve shall be used as sand. The mortar shall be mixed in the proportion specified in the schedule of quantities. The required quantity of sand (for one bag of cement only) will be measured and shall be mixed dry by turning over and over till all particles of sand are well coated with cement. Minimum quantity of water to ensure work ability will be added and then mortar turned over and over until homogeneous. The mixing will be done on watertight platforms as specified for cement concrete. Only sufficient mixture will be wetted as can be used within half an hour of mixing.

Workmanship- The bock masonry is to be in English bond and no more bats shall be used than are necessary to complete the bond. The height of any course shall not exceed 6 inches. Special care shall be exercised in selecting the block face, which will be pointed. The better face being on the side of pointing and inferior face being on the side of plaster. For walls of greater than 6 inches thickness header and stretcher course similar to brickwork must be used.
In laying each course must be truly level and in perfect bond. All blocks being thoroughly bedded and finished with mortar. The thickness of joints shall not exceed ½ inch. The walls must be carried up regularly and no portion of the work is left more than 3 feet lower than any other. Temporary steps during the construction must be raked according to the bond and not toothed so that when the work is continued the new blocks will be laid over those previously laid and not between them. All masonry work will be kept wet for at least 10 days after it is laid.

All fixtures shall be built into the walls in correct position as the work proceeds, joints of all masonry work shall be raked out while the mortar is still green to a depth of ¾ inch to ensure a good key for plaster or pointing. Scaffolding must be provided in a sound workmanlike manner to the satisfaction of the Engineer-in-charge. The contractor's rate shall include the cost of all material, plant, scaffolding cost of platform for moulding. Tendered rate shall be for all masonry work whether in column or pillars or in walls.

Cement Concrete 1:2:4 in benching and Reinforced concrete

Proportions:-

Cement one part (1 cubic ft) Sand two parts (2 cubic ft). Stone ballast Four parts (4 cubic feet)

Aggregate. – The aggregate shall consist of bajri obtained from approved quarry and shall in general be up to the quality of bajri obtained from the Country Club quarries. The bajri shall be screened through ¾ and 3/16 inch sieve to remove fine and coarse matter from it.

Mixing. – The concrete shall be mixed in an approved mechanical mixer, which shall not be of capacity less than 10/7 Cft. The quantity of material mixed in the machine shall not exceed the manufacturers rated capacity. After all the materials are loaded into the drum, the concrete shall be mixed until it is uniform in colour and consistency but for not less than 1½ minutes. Every effort shall be made to control the speed of rotation to conform to the manufacture's recommendations. No more concrete shall be mixed than can be used before the initial set has been commenced. Should it be found necessary according to the particular mixer in use, the actual time of mixing which may exceed 1½ minutes will be specified after experiments by the Engineer-in-charge.

Other specifications shall be the same as for cement concrete 1:3:6

Placing and compacting – Concrete must be placed in position within half an hour of the addition of water and it shall not be disturbed after that period. Concrete shall be mixed only in such quantities, which can be readily placed in position.

All debris, Sawdust, etc, shall be removed from the shut erring, before any concrete is placed. Care shall be taken to see that the shuttering is not likely to absorb water. The form unless otherwise ordered by the Engineer-in-charge shall be well greased (except on the face intended to receive plaster) in order to prevent adhesion of concrete. The Engineer-in-charge may direct the contractor to cover the centering with water proof oil paper to effect water tightness if he finds that the entering provided by the contractor is not absolutely water proof. Concrete shall be handled from the place of mixing to the place of final deposit as quickly and gently as practicable by methods approved by the Engineer-in-charge, to prevent the segregation or loss of ingredients.

It is essential that the foreman who has charge of concrete works, whether reinforced or plain is qualified and skilled in this class of work and superintends personally the whole construction. If concrete work is in progress at more than one place, each place must be in charge of an experienced assistant foreman.

The concrete shall be deposited as evenly as possible in horizontal layers, each layer being thoroughly compacted before the succeeding layer is placed. It shall not be deposited continuously at one spot and allowed to flow into position along the formwork by gravity. It shall be worked uniformly into position by roding, tamping or vibrating methods of compacting (vibrating will be preferred).

Concrete shall not be dropped but will be laid into position except in case of columns where it may be dropped from a height not exceeding 3 feet.

Cement concrete in reinforced work is to be deposited in quantities, which will permit its being properly worked and tamped with rods and specials slicing tools to expel all air bubbles and surplus water. It shall be thoroughly and carefully worked around all reinforcements and around embedded structure into the corners of the form work and against all exposed faces of the work so that material finer than used in the body of the work is worked into these positions and a good bond and face is obtained.

Concrete work shall only be stopped at predetermined positions or stopping places approved by the Engineer-in-charge. The concrete when interrupted shall be left with a level and rough top or side surface and with ends vertical. When work has to be resumed on surface which has hardened, such surface shall be well roughened and all laitance removed, it shall then be swept clean with wire brushes, thoroughly wetted and covered, with a thin layer of cement mortar of 1;2 proportion. Great care must be taken to avoid any weakness at the junction of old and new concrete.

Setting and curing. The concrete after pacing shall be protected during the first stages of hardening from harmful effects of sunshine, drying wind, cold and from running water on its surface.

Concrete floors and similar large areas shall be protected by covering with moist hessian, sand or other moisture retaining material approved by the 'Engineer-in-charge, as soon as the concrete has hardened sufficiently to permit doing so without marring the surface. Walls or other sections shall be protected by hanging moist canvas or burlap over them. The concrete shall be cured for a period of not les than 14 days.

Reinforcement. – Length and position of the reinforcement must be rigidly adhered to,
"Great care must be taken in placing the reinforcement in positions shown in the drawings and in retaining it there during ramming or temping of concrete. Small blocks of precast 1:2:4 concrete (1½ inch X 1½ inch X clear cover) will be made and put into the beam, slab and lintel at regular intervals to ensure that the minimum layer of concrete under the reinforcement is provided to avoid exposure of steel.

The rods crossing one another shall be bound at every intersection and at sufficient number of places with No.20, S.W.G annealed wire to make the skeleton or net-work perfectly rigid.; The loop must be tightened with a piller without snapping.

All stirrups shall e properly fastened to the rods so as to retain their position during ramming of concrete.

The bars will be bent cold, accurately to the size and shape shown on the details by a machine and every type is to be marked with stags fastened to the rods to facilitate sorting and arranging. Should the contractor provide lengths of reinforcement which are greater than those shown in the schedule, no payment for here extra lengths would be made. If smaller lengths are allowed to be provided than those shown in the schedule payment will be made for the actual lengths used.

The concrete covering the reinforcement shall be as shown in the drawing and in no case less than ½ inch or the diameter of the rod whichever is more. The depth of the precast cube mentioned above will vary according to the cover.

Small wooden bridges will be provided by the contractor to enable the movement of the labour after the reinforcement is placed and tied in position.

Form work, Shuttering and Scaffolding. – The contractor shall install all the shuttering including covers, moulds, or supports etc. required for all the concrete construction including special requirements for moldings.

The surface of all such shuttering shall present a smooth surface next to the concrete. All shuttering should be thoroughly placed in such a manner as to sustain, without excessive deflection, all the stresses to which they may be subjected. Shuttering shall e waterproof and shall be thoroughly wetted before the concrete is placed.

Removal of shuttering. – Shuttering shall be removed with utmost care in all cases so as to cause no damage to any construction or to any store material. It shall not be removed until the concrete has thoroughly set to the satisfaction of the Engineer-in-charge. Where necessary as desired by the Engineer-in-charge, temporary supports shall be installed to support any concrete work when shuttering is removed.

The minimum period for which the shuttering should be kept in position is given below:-

(i). Columns sides. .... 72 hours
(ii) Beams Sides.................................. Do

(iii) Slabs.. One day per foot of span with a minimum of en days and maximum of 21 days.

(iv) Beams soffits of beams below 20 ft. span.. -do-
(v) Beams soffits of beams below 2 ft span.... -do-

(vi) Cantilevers.. One receipt of written instructions from the A.E in-charge.

After the cantering is removed the surface plain and or reinforced concrete shall not be plastered or in any way disturbed till it has been inspected by the Sub-Divisional Officer-in-charge of the work. If the surface is not even and bars are found to be exposed, the Engineer-in-charge reserves the right to order the whole work to be dismantled and replaced at the contractors cost and risk.

1:9 CEMENT CONCRETE BLOCK MASONRY

1. MATERIAL – Aggregate. – The aggregate shall be a mixture of gravel and sand locally called bajri, Bajri shall be obtained from approved quarries and shall be generally up to the quality of bajri obtained from the Country Club quarries. It shall be graded from 1 inch down to tayler sieve No.100 i.e. whole of the material shall pass through 1 inch sieve and shall be retained on taylor sieve No. 100 and should ranging in size down to also be so graded that the material ranging in size 1 inch down 3/16 inch is not less than the material finer than 3/16 inch. The bajri obtained from quarries will be screened through 3/16 inch sieve to conform with this requirement. The bajri shall be free from soft, friable, flaky, elongated, or laminated pieces. It must be free from dirt, silt, shale, clay, alkali, or other organic matter. Bajri shall be washed before being used on the work if required by the Engineer-in-Charge.

2 Cement. – As specified for 1:5:10 cement concrete for foundation

3. Proportioning – The unit of measurement shall be a bag of cement. The standard proportioning for this class of concrete be as under:-

(a). For a bag of one cubic foot – Cement one part (1 Cft) bajri 9 parts (9 cft)
(b) For a bag of 1.2 cubic feet – Cement one part (1.2 cft) bajri 9 parts (10.8 cft)

The size of the box for measuring the aggregate shall be as under:-

(a). For a bag of one cubic foot – 3'X3'X1' high.
(b) For a bag of 1.2 cubic feet – 3'X3' – 7 1/5" X 1' high

4. Mixing – This shall generally be the same as specified for 1:3:6 cement concrete block masonry except that no sand is to be used.

5. Forms for blocks. –Casting curing, proportion of mortar and workmanship shall be he same as specified for 1:3:6 cement concrete block masonry.

CEMENT PLASTER

The cement shall be as specified already. The sand shall be of medium coarse grain obtained from Malier or other approved quarries.

The joints of the masonry work over which the cement plaster is to be applied should be raked to a depth of not less than ¾" while the masonry is still green. The walls, before plastering is commenced, should be washed with fresh water and kept damp from at least 2 hours.

The proportion of the mortar shall be as specified in the schedule of quantities and the mortar shall be mixed on a water light platform by turning over and over back-wards and forwards using correct proportions of the ingredients in single cement bag batches. The plastering shall be done in two coats where the specified thickness is ¾", the first coat should be roughened before the finishing coat is completed. The thickness of the plaster shall be as specified in the schedule of quantities. The finished surface is to be smoothed with wooden trowel if it is intended to be the base for colour washing or distempering, etc. The plastered surface is to be kept damp for at least ten days. No extra payment will be made to the contractor for thicker plaster required use to any un-evenness in the work. The contractor's rate shall include the cost of rounding of junctions of walls, jambs, junctions of walls and ceiling to the radius shown on the drawing or as directed by the Engineer-in-charge.

FLOATING COAT OF NEAT CEMENT

Immediately after the surface has been plastered and while the plaster is still green a floating coat of neat cement of the specified thickness shall be applied on it and the surface rubbed smooth with steel trowel. No trowel marks are to be left on the surface. If trowel marks are visible after the surface has been finished it may be required to be dismantled and re-done. No payment for the work dismantled will be made.

For all other items of Civil Engineering Works, the current specifications Of the Pak P.W.D shall be applicable.

OPEN SURFACE DRAIN

These shall be constructed of cement concrete 1:2:4 block masonry in 1:3 cement mortar or cement concrete 1:2:4 laid in situ on 4" thick bed of C.C. 1:2:4 . The invert shall be semi-circular in shape and shall be constructed to proper gradient. The thickness of the sides shall be 4" and provided with ½" thick cement plaster 1:3 on all faces finished smooth with 1/8" floating coat of neat cement. The rate of this item shall include the cost of excavation, refilling in sides and disposal of surplus stuff.

ROAD CUTTING

Roads where cut shall be made good to the satisfaction of the Engineer-in-Charge of the roads, otherwise he debit received for making god shall be recovered from contractor's bill. Where the tarred road is cut, concrete consisting of 1½ " stone ballast in mud shall be laid (for refilling the trench) on the pipe, the last one foot being filled with cement concrete 1:2:4 with 1½ " stone ballast. Road painting shall be carried out by the department in-charge of the road.

Contractors shall be responsible for the safety of trenches and for any damage caused by subsidence of trenches. Contractor shall provide adequate and proper timbering in trenches and lighting arrangements, protective barricading and watch and ward men, the cost of which shall be borne by the contractor and shall therefore be deemed to have been included by him in the rates tendered by him for the items of drainage and water supply works.

PART - III
WATER SUPPLY & SANITATION

SANITARY FITTINGS

Sub-Head Code-301

S.No.	Description	Unit	Rate in Rs.
1	Providing and fixing best quality squatting type with glazed earthen wire W.C. pan Pakistani (of not less then 18" clear opening as measured between flushing rims) complete with and including the cost of best quality low level plastic slushing cistern of standard size with internal fittings complete, P.V.C flushing pipe suitable for squatting type with extra bends and length with fittings, C.I trap 4 inches (100mm)d dia and making requisite number of holes in walls, plinth & floor for pipe connection and making good in cement concrete 1:2:4.	Each	12,602.50
2	Do. Do. With 4 Inch (100mm) dia. white glazed earthenware trap Do..	Each	11,227.50
3	Providing and fixing squatting type W.C.Pan in white vitreous china with integral treads (Pakistani) orissa pattern and C.I. trap 100mm dia. Complete with and including the best quality low level plastic flushing cistern of standard size with internal fittings complete, P.V.C. flushing pipe suitable for this type with fittings and making requisite number of holes in walls, plinth & floor for pipe connections and making good in cement concrete 1:2:4..	Each	13,602.50
4	Do. Do. Do with a white vitreous china 4 inches . (100mm) dia trap. Do Do Do..	Each	12,227.50
5	Providing and fixing Pakistani best quality European style white glazed earthenware W.C pan complete with and including cost of plastic seat with Buffers, best quality low level plastic flushing cistern of standard size with internal fittings complete, P.V.C. flushing pipe with fittings and making requisite number of holes in walls, plinth and floor for pipe connections and making good in ce-ment concrete 1:2:4.	Each	14,312.50
6	Providing and fixing Pakistani best available quality European style white glazed earthenware Wash Down W.C pan complete with and including cost of Plastic seat, 3 Galns White Glazed earthenware low level flushing cistern of standard size with siphon fittings. 1-1/2 inches (40 mm) dia, white porcelain enamelled flush bend 3/4 inch (20 mm) dia G.I. warning pipe carried outside and bent vertically downwards and making requisite number of holes in walls, plinth and floor for pipe connections and making good in cement concrete 1:2:4.	Each	13,420.00
7	Providing and fixing Pakistani make flat back lipid front urinal basin (of not less than 17 inches or 430 mm in height of white glazed earthenware complete with and including the cost of one gallon (4.5 litres) glazed earthen ware automatic flushing cistern with fittings a pet cock brackets standard flush pipe with fittings, standard waste pipe (enamelled iron) connection complete and making requisite number of holes in walls plinth and floor for pipe connections and making good in cement concrete 1:2:4.	Each	18,767.50

SANITARY FITTINGS - Sub-Head Code-301

S.No.	Description	Unit	Rate in Rs.
8	Providing and fixing 25 inches x 18 inches (635 mm x 457 mm) lavatory basin in white glazed earthenware (Pakistani) complete with and including the cost of Brass oxidized bolts kit built into wall /2 inch (15 mm) dia. Chrome plated mixer 1-1/4" inches (32mm) rubber plug and chrome plated brass chain, 1-1/4 inches (32 mm) dia brass waste of approved pattern, 1-1/4 inches (32 mm) dia. Malleable iron or C.P. brass traps malleable iron or brass unions and making requisite number of holes in walls plinth and floor for pipe connections and making good in cement concrete 1:2:4.	Each	15,262.50
9	Providing and fixing 22 inches x 16 inches (560 x 406 mm) lavatory basin in white glazed earthenware (Pakistani) complete with and including the cost of Brass oxidized bolts kit built into walls 1/2 inches (15 mm) dia. Chrome plated mixer, 1-1/4 inches (32 mm) rubber plug and chrome plated brass chain 1-1/4 inches (32 mm) dia brass waste of approved pattern 1-1/4 inches (32 mm) dia chromium plated battal trap with unions and making requisite, number of holes in walls, plinth and floor for pip.e connections and making good in cement concrete 1:2:4..	Each	12,262.50
10	Extra over item No. 8 and 9 for providing and fixing best available (Pakistani make) white glazed earthenware pedestal..	Each	2,918.75
11	Providing and fixing Pakistani bath tub made of Fiber glass of any color and design (over-all approximate size ' 5 feet - 6 inches x 2 feet - 4 inches x 1 feet -11 inches or 1680 mm x 711 mm x 584 mm) and including the cost of 1-1/2 inches (40 mm) C.P. brass waste, 1-1/4 inches (32 mm) dia brass overflow, common both mixer with telephonic shawer complete C.P. brass chain, with rubber plug and making requisite number of holes in walls, plinth and floor for pipe connections and making good in cement concrete 1:2:4....	Each	33,478.50
12	Providing and fixing Pakistani bath tub made of Fiber glass of any color and design (over-all approximate size 6' x 2' 4 inches x 1 feet - 11 inches or 1830 mm x 710 mm x 584 mm) and including the cost of 1-1/2 inches (40 mm) C.P. brass waste, 1-1/4 inches (32 mm) dia brass overflow, common both mixer with telephonic shawer complete C.P. brass chain, with rubber plug and making requisite number of holes in walls, plinth and floor for pipe connections and making good in cement concrete 1:2:4....	Each	37,228.50
13	Providing and fixing Shower tray made of fiber glass of any colour and design 31 inches x 31 inches (787 mm x 787 mm)..	Each	6,587.50
14	Extra over item No.8 and 9 for providing single hole chromium plated mixer tap 1/2 inch (15 mm) dia (English or approved foreign make)..	Each	3,698.75
15	Providing and fixing 6 inches x 2 inches or 6 inches x 3 inches (150 mm x 50 mm or 150 mm x 80 mm) C.I. floor trap of approved self cleansing design with C.I. screwed down grating with or without a vent arm complete with and including making requisite number of holes in walls, plinth and floor for pipe connection and making good in cement concrete 1:2:4.	Each	1,439.25

SANITARY FITTINGS - Sub-Head Code-301

S.No.	Description	Unit	Rate in Rs.
16	Providing and fixing C.I. trap with 4 inches (100 mm) dia inlet and 4 inches (100 mm) dia outlet of the approved self cleansing design with C.I. grating with or without a vent arm including cost of making requisite number of holes in wall, plinth and floor for pipe connection and making good in cement concrete 1:2:4.	Each	2,239.25
17	Providing 1/2 inch (15 mm) dia plastic connection complete with a 1/2 inch (15 mm) dia brass stop cock two brass nuts and lining jointed to plastic pipe.	Each	824.50
18	Deduct if PVC waste pipe is used instead of G.I. telescopic flush pipe in low level cisterns or wash basins and sinks..	Each	243.13
19	Providing and fixing white glazed earthen ware bidet with mixer and fittings (Pakistani make of approved quality) in bath room..	Each	17,196.88
20	Providing and fixing standing wall shower of CP brass 3 knobs of approved quality mixer unit and moveable shower head complete..	Each	6,127.50
21	Providing and fixing approved quality stainless steel sink 60" x 20" Pak made (Atlas) or equivalent complete with brass oxidized bolt kit/angle iron brackets built into walls ½" dia CP sink mixer 1-1/4" rubber plug and CP brass chain 1-1/4" CP brass waste 1-1/4" dia malleable iron or CP brass bottle trap with malleable iron or brass unions and making requisite number of holes in walls, plinth and floor for pipe connections and making good in cement concrete 1:2:4	Each	34,495.00
22	Providing and fixing approved quality stainless steel sink 48" x 20" Pak made (Atlas) or equivalent complete with brass oxidized bolt kit/angle iron brackets built into walls ½" dia CP sink mixer 1-1/4" rubber plug and CP brass chain 1-1/4" CP brass waste 1-1/4" dia malleable iron or CP brass bottle trap with malleable iron or brass unions and making requisite number of holes in walls, plinth and floor for pipe connections and making good in cement concrete 1:2:4	Each	18,370.00
23	Providing and fixing approved quality stainless steel sink 33" x 18" Pak made (Atlas) or equivalent complete with brass oxidized bolt kit/angle iron brackets built into walls ½" dia CP sink mixer 1-1/4" rubber plug and CP brass chain 1-1/4" CP brass waste 1-1/4" dia malleable iron or CP brass bottle trap with malleable iron or brass unions and making requisite number of holes in walls, plinth and floor for pipe connections and making good in cement concrete 1:2:4	Each	16,495.00
24	Providing & fixing approved Pak make Earthen ware glazed corner basin standard size (White/light colour) complete with and including the cost of brass oxidized bolt kits built into wall ½"dia C-P mixer, 1-1/4" dia brass waste of approved pattern 1-1/4" dia Malleable iron or C-P brass bottle traps malleable iron with brass unions and making requisite number of holes in walls, plinth and floor for pipe connection and making good in cement concrete 1:2:4. i/c cost of cartage at site.	Each	15,362.50
25	Providing and fixing approved quality earthen ware glazed vanity basin standard size (White/light colour) and including the cost of 1-1/4" dia brass waste 1-1/4" rubber plug and chrome plated brass chain PVC waste pipe 1-1/4" dia of approved pattern etc. complete.	Each	11,420.63

S.No.	Description	Unit	Rate in Rs.
26	Providing and fixing best quality white glazed earthenware Two piece toilet (commode) coupled with flush tank (Porta or Equivalent) complete with and including cost of plastic seat with Buffers, with internal fittings complete .	Each	25,375.00
27	Providing and fixing best quality white glazed earthenware One piece toilet (commode) coupled with flush tank (Porta or Equivalent) complete with and including cost of plastic seat with Buffers, with internal fittings complete .	Each	47,750.00
28	Providing and fixing best quality squatting type earthern ware W.C. pan (Porta or equivelent) complete with and including the cost of 13.6 litre best quality low level plastic slushing cistern with internal fittings complete, P.V.C flushing pipe suitable for squatting type with extra bends and length with fittings, PVC trap 4 inches (100mm)d dia and making requisite number of holes in walls, plinth & floor for pipe connection and making good in cement concrete 1:2:4.	Each	19,665.00
29	Providing and fixing approved quality earthen ware glazed vanity basin (Porta or equivelent) standard size (White/light colour) and including the cost of 1-1/4" dia brass waste 1-1/4" rubber plug and chrome plated brass chain PVC waste pipe 1-1/4" dia of approved pattern etc. complete.	Each	16,420.63
30	Providing and fixing uPVC Mutli floor trape of sizes with gratings including cutting and making the requisite number of holes in walls, plinth and floors and making good in 1:2:4, C.C.	Each	1,459.43 1,459.43

TIOLET REQUISITES

Sub-Head Code-302

S.No.	Description	Unit	Rate in Rs.
1	Providing and fixing 30" x 3/4"(762 mm x 20 mm) dia approved quality of chrome plated brass towel rail complete with brackets fixed with 1"(25 mm) long C.P brass screws and rawal plug.	Each	2,720.91
2	Providing and fixing 24"x3/4"(610 mm x 20 mm) dia approved quality of chrome plated brass towel rail complete with brackets fixed with 1"(25 mm) long C.P brass screws and rawal plug.	Each	2,475.50
3	Providing and fixing approved quality C.P. brass toilet paper holder.	Each	1,970.91
4	Providing and fixing plastic (PVC) toilet paper holder in wall complete of any colour.	Each	964.66
5	Providing and fixing 24 inches x 18 inches (610 mm x 457 mm) looking mirror of Imported glass 5 mm thick fixing with CP clamps and screws	Each	2,173.98
6	Providing and fixing 20 inches x 16 inches (508 mm x 406 mm) Looking mirror of Belgium glass complete with Plastic frame and C.P. Brass screws.	Each	3,045.74
7	Providing and fixing glass shelf 25 inches x 5 inches (610 mm x 127 mm) brackets and guard rail complete..	Each	758.24
8	Providing and fixing plastic shelf of standard size of any colour and design with CP brass screws.	Each	1,079.24
9	Providing and fixing bath room accessories of set of 6 pieces consist of one shelf, one towel rod with bracket, one towel ring, one soap dish, one tooth Brush holder with glass, one tissue paper holder one double hook etc complete of approved quality as per direction of Engineer in-charge.	Each	11,812.50
10	Providing and fixing bath room accessories of set of 7 pieces consist of one cosmatic shelf, one towel rod with bracket, one soap dish, one tooth brush holder with glass and cover, one tissue paper holder one double hook one towel ring etc complete of approved quality as per direction of Engineer in-charge.	Each	12,062.50
11	Providing and fixing Royal bath room accessories of set of 7 pieces consist of one cosmetic shelf, one towel rod with bracket, one soap dish, one tooth brush holder with glass and cover, one tissue paper holder one double hook one towel ring etc complete of approved quality as per direction of Engineer in-charge.	Each	12,687.50

TIOLET REQUISITES - Sub-Head Code-302

S.No.	Description	Unit	Rate in Rs.
12	Providing and fixing Royal bath room accessories of set of 6 pieces consist of one towel rod with bracket, one tooth brush holder with glass and cover, one double hook one towel ring etc complete of approved quality as per direction of Engineer in-charge.	Each	10,405.25
13	Providing & fixing chromium plated Muslim bib-cock with Muslim Shower of approved quality.	Each	3,381.75

SANITARY FITTINGS ETC. SEPARATELY ORDERED FOR MAINTENANCE AND REPLACEMENT WORKS

Sub-Head Code-303

S.No.	Description	Unit	Rate in Rs.
1	Providing and fixing approved quality of Plastic Sheet with lid, buffers.	Each	1,201.54
2	Providing and fixing approved quality of Pakistani make Stainless steel sink 48" thick x 20" (1016 mm x 508 mm)	Each	7,787.82
3	Providing and fixing approved quality of Pakistani make Stainless steel sink 33" x 18" (838 mm x 457 mm).	Each	5,912.82
4	Providing and fixing C.P. brass chain and rubber plug for sinks and lavatory basins....	Each	255.40
5	Providing and fixing 1-1/4 inches (32 mm) dia C.P. brass bottle trap....	Each	2,646.60
6	Providing and fixing 1-1/2 inches (40 mm) dia C.P. brass bottle trap of 3 inches (80 mm) seal..	Each	2,646.60

CAST IRON SOIL WASTE AND VENT PIPES (Spun)
SUB-HEAD CODE-304

S.No.	Description	Unit	Rate in Rs.
1	Providing and fixing 4 inches (100 mm) dia C.I. soil and vent pipes spun including cutting and fitting and extra painting to match the colour of the building and cartage within 10 miles (16,09 km.).	Rft Ru.m	789.06 2,588.92
2	Providing and fixing M.S. clamps of the approved design to 4 inches (100 mm) dia C.I. pipe spun sockets including the cost of cutting and making good to wall or M.S. bolts and nuts built. 4 inches (100 mm) in to wall including pipe distance pieces, extra painting to match the colour of the building and cartage within 10 miles. (16.09 km.)..	Each	415.85
3	Providing and fixing 4 inches x 4 inches (100 mm x 100 mm) dia C.I. branch of the required degree with access doors rubber washer 1/8 inch (3.2 mm) thick and bolts and nuts and extra painting to match the colour of the building and cartage within 10 miles (16.09km.) (for Spun pipe).	Each	3,663.05
4	Providing and fixing 4 inches x 4inches x 4 inches (100 mm x 100mm x 100mm) dia C.I. branch of the required degree with access doors rubber washer 1/8 inch (3.2 mm) thick and bolts and nuts and extra painting to match the colour of the building and cartage with in 10 miles (16.09 km.). (for Spun pipe)..	Each	3,663.05
5	Providing and fixing 4 inches x 4 inches (100mm x 100mm) dia plain C.I. branch of the required degree including extra painting to match the colour of the building and cartage within 10 miles (16.09 Km). (for Spun pipe).	Each	3,619.30
6	Providing and fixing 4 inches x 4 inches x 4 inches (100mm x 100mm x 100mm) dia plain C.I. branch of the required degree including extra painting to match the colour of the building and cartage within 10 miles (16.09 Km). (for Spun pipe).	Each	3,619.30
7	Providing and fixing 4 inches x 3 inches (100mm x 80mm) dia C.I. branch of the required degree with access door rubber washer 1/8 inch (3.2 mm) thick and bolts and nuts and extra painting to match the colour of the building and cartage's within 10 miles (16.09 Km). (for Spun pipe).	Each	3,506.25
8	Providing and fixing 4 inches x 3 inches x 3 inches (100mm x 80mm x 80mm) dia C.I. branch of the required degree with access door, rubber washer 1/8 inch (3.2 mm) thick and bolts and nuts and extra painting to match the colour of the building and cartage within 10 miles. (16.09 Km). (for Spun pipe).	Each	4,682.25
9	Providing and fixing 4 inches x 3 inches (100mm x 80 mm) dia plain C.I. branch of the required degree including extra painting to match the colour of the building and cartage within 10 miles (16.09 Km). (for Spun pipe).	Each	3,462.50
10	Providing and fixing 4 inches x 3 inches x 3 inches (100mm x 80mm x80mm) dia plain C.I branch of required degree including extra painting to match the colour of the building and cartage within 10 miles (16.09 Km). (for Spun pipe).	Each	4,638.50

CAST IRON SOIL WASTE AND VENT PIPES (Spun) - SUB-HEAD CODE-304

S.No.	Description	Unit	Rate in Rs.
11	Providing and fixing 4 inches x 2 inches (100mm x 50mm) dia C.I. branch of the required degree with access door rubber washer 1/8 inch (3.2mm). Thick and bolts and nuts and extra painting to match the colour of the building and cartage within 10 miles (16.09 Km). (for Spun pipe).	Each	3,506.25
12	Providing and fixing 4 inches x2 inches x 2 inches (100mm x 50mm) dia C.I. branch of the required degree with access door, rubber washer 1/8 inch (3.2 mm) thick and bolts and nuts and extra painting to match colour of the building and cartage within 10 miles (16.09 Km) (for Spun pipe).	Each	4,682.25
13	Providing and fixing 4 inches (100mm) dia C I. off-sets of various length including extra painting to match the colour of the building and cartage within 10 miles (16.09 Km). (for Spun pipe)..	Each	2,107.30
14	Providing and fixing 4 inches (100mm) dia C.I. bend of the required degree with access door, rubber washer 1/8 inch (3.2mm) thick and bolts and nuts and extra painting to match the colour of the building and cartage within 10 miles (16.09 Km). (for Spun pipe).	Each	1,035.95
15	Providing and fixing 4 inches (100mm) dia C.I. plain bend of the required degree including to match the colour of the building and cartage within 10 miles (16.09 Km). (for Spun pipe).	Each	992.20
16	Providing and fixing 4 inches (100mm) dia C.I. terminal guard including extra painting to match the colour of the building and cartage within 10 miles (16.09 Km). (for Spun pipe).	Each	1,704.70
17	Providing and fixing lead caucked joints to 4 inches (100mm) dia C.I. pipes and fitting (for Spun pipe).	Each	769.69
18	Providing and fixing 3 inches (80mm) dia C.I. waste and vent pipe including cutting fitting and extra painting to match the colour of the building and cartage within 10 miles (16.09 Km) (for Spun pipe)..	Rft Ru.m	695.74 2,282.72
19	Providing and fixing M.S. clamps of the approved design to 3 inches (80mm) dia C.I. pipe sockets including the cost of cutting and making good to wall or M.S. Bolts and nuts built 3 inches (80mm) into walls including pipe distance pieces and extra painting to match the colour of the building and cartage within 10 miles. (16.09 Km) (for Spun pipe).	Each	390.85
20	Providing and fixing 3 inches x 3 inches (80mm x 80mm) dia C.I. branch of the required degree with access door rubber washer 1/8 inches(3.2mm) thick and bolts and nuts and extra painting to match the colour of the building and cartage within 10 miles. (16.09 Km) (for Spun pipe).	Each	1,751.83
21	Providing and fixing 3 inches x 3 inches x 3 inches (80mm x 80mm x 80mm) dia C.I. branch of the required degree with access door, rubber washer 1/8 inch(3.2mm) thick and bolts and nuts and extra painting to match the colour of the building and cartage within 10 miles. (16.09 Km) (for Spun pipe).	Each	2,696.83

CAST IRON SOIL WASTE AND VENT PIPES (Spun)
SUB-HEAD CODE-304

S.No.	Description	Unit	Rate in Rs.
22	Providing and fixing 3 inches x 3 inches (80mm x 80mm) dia C.I. plain branch of the required degree including extra painting to match the colour of the building and cartage within 10 (16.09 Km) (for Spun pipe).	Each	1,620.58 1,620.58
23	Providing and fixing 3 inches x 3 inches x 3 inches (80mm x 80mm x 80mm) dia C.I. plain branch of the required degree including extra painting to match the colour of the building and cartage within 10 miles. (16.09 Km) (for Spun pipe).	Each	1,620.58
24	Providing and fixing 3 inches (80mm) dia C.I. offsets of various lengths including extra painting to match the colour of the building and cartage within 10 miles. (16.09 Km) (for Spun pipe).	Each	1,786.48
25	Providing and fixing 3 inches (80mm) dia C.I. bend of the required degree with access door, rubber washer 1/8 inch (3.2mm) thick and bolts and nuts and extra painting to match the colour of the building and cartage within 10 miles. (16.09 Km) (for Spun pipe)..	Each	1,331.83
26	Providing and fixing 3 inches (80 mm) dia C.I. plain bend of the required degree including extra painting to match the colour of the building and cartage within 10 miles. (16.09 Km) (for Spun pipe).	Each	1,288.08
27	Providing and fixing 3 inches (80mm) dia C.I. terminal guard including extra painting to match the colour of the building and cartage within 10 miles. (16.09 km.) (for Spun pipe).	Each	1,288.08
28	Providing and fixing lead caulked joints to 3 inches (80mm) dia C.I. pipe and fittings (for Spun pipe).	Each	583.64
29	Providing and fixing 2 inches (50mm) dia C.I. waste and vent pipes including cutting fitting and extra painting to match the colour of the building and cartage within 10 miles. (16.09 km.) (for Spun pipe)..	Rft Ru.m	408.52 1,340.35
30	Providing and fixing M.S. clamps of approved design to 2 inches (50mm) dia .C.I pipe sockets including the cost of cutting holes and making good to walls or M.S. bolts and nuts built 2 inches (50mm) into walls including pipe distance pieces and extra painting to match the colour of the building and cartage within 10 miles (16.09 Km) (for Spun pipe).	Each	365.31
31	Providing and fixing 2 inches x 2 inches (50mm x 50mm) dia C.I. branch of the required degree with access door rubber washer 1/8 inches (3.2mm) thick and bolts and nuts and extra painting to match the colour of the building and cartage within 10 miles. (16.09km.) (for Spun pipe).	Each	1,218.60
32	Providing and fixing 2 inches x 2 inches x 2 inches (50mm x 50mm x 50mm)dia C.I. branch of the required degree with access door, rubber washer 1/8 inches (3.2mm) thick and bolts and nuts and extra painting to match the colour of the building and cartage within 10 miles. (16.09 Km) (for Spun pipe).	Each	1,610.75
33	Providing and fixing 2 inches x 2 inches (50mm x 50mm)dia. plain branch of the required degree including extra painting to match the colour of the building and cartage within 10 miles (16.09 Km) (for Spun pipe).	Each	1,479.50
34	Providing and fixing 2 inches x 2 inches x 2 inches (50mm x 50mm x 50mm)dia. C.I. plain branch of the required degree including extra painting to the colour of the building and cartage within 10 miles (16.09 Km) (for Spun pipe).	Each	1,567.00

CAST IRON SOIL WASTE AND VENT PIPES (Spun) -SUB-HEAD CODE-304

S.No.	Description	Unit	Rate in Rs.
35	Providing and fixing 2 inches (50mm) dia. C.I. offsets of various lengths including extra painting to match the colour of the building and cartage within 10 miles.(16.09 Km) (for Spun pipe).	Each	1,589.40
36	Providing and fixing 2 inches (50mm) dia. C.I. bend of the required degree with access door, rubber washer 1/8 inches (3.2mm) thick and bolts and nuts and extra painting to match the colour of the building and cartage within 10 miles.(16.09 Km) (for Spun pipe).	Each	1,534.84
37	Providing and fixing 2 inches (50mm) dia. C.I. plain bend of the required degree including extra painting to match the colour of the building and cartage within 10 miles.(16.09 Km) (for Spun pipe).	Each	1,107.80
38	Providing and fixing 2 (50mm) dia. C.I. terminal guards including extra painting to match the colour of the building and cartage within 10 miles.(16.09 Km) (for Spun pipe).	Each	570.20
39	Providing and fixing lead caulked joints to 2 inches (50 mm) dia. C.I. pipes and fitting (for Spun pipe).	Each	312.96
40	Providing and fixing floor waste 6" x 6" (Stainless Steel) Jali etc complete	Each	2,023.58

WATER SERVICES (INTERNAL)
SUB-HEAD CODE NO. 305

S.No.	Description	Unit	Rate in Rs.
1	Providing G.I. pipes, specials and clamps etc., including fixing cutting and fitting complete with and including the cost of breaking through walls and roof, making good etc., painting 2 coats after cleaning the pipe etc.; with white zinc paint with pigment to match the colour of the building and testing with water to a pressure head of 200 feet (61 M) and cartages within 10 miles (16.09 km.) (ILLM). 1/2 inch (15mm) dia pipe.	R.ft	202.94
		Ru.m	665.84
2	Do. Do. 3/4 inch (20 mm) dia pipe. (ILLM).	R.ft	257.38
		Ru.m	844.45
3	Do. Do. 1 inch (25 mm) dia pipe (ILLM).	R.ft	366.46
		Ru.m	1,202.37
4	Do. Do. 1-1/4 inches (32 mm) dia pipe (ILLM).	R.ft	473.30
		Ru.m	1,552.81
5	Do. Do. 1-1/2 inches (40 mm) dia pipe (ILLM).	R.ft	534.17
		Ru.m	1,752.52
6	Do. , Do. 2 inches (50 mm) dia pipe (ILLM).	R.ft	718.54
		Ru.m	2,357.42
7	Do. Do. 3 inches (80 mm) dia pipe (ILLM).	R.ft	1,142.06
		Ru.m	3,746.92
8	Do. Do. 4 inches (100 mm) dia pipe (ILLM).	R.ft	1,787.59
		Ru.m	5,864.81
9	Do. Do. 5 inches (125 mm) dia pipe (ILLM).	R.ft	2,366.59
		Ru.m	7,764.41
10	Do. Do. 6 inches (150 mm) dia pipe (ILLM).	R.ft	2,791.97
		Ru.m	9,160.02

WATER SERVICES (EXTERNAL)
SUB-HEAD CODE NO. 306

S.No.	Description	Unit	Rate in Rs.
1	Providing G.I. pipes and specials, etc.; including fixing, cutting and fitting, complete with and including the cost of cutting trench upto 2-1/2 feet (762 mm) deep, refilling, watering, ramming and disposal of surplus earth within one chain and painting 2 coats of bitumen paint to pipes and specials after cleaning and hessian cloth soaked in maxphalt composition wrapped tightly round the pipes and testing to a pressure head of 200 feet (61 m) and cartage within 10 miles. (16.09km). (ILLM). 1/2 inch (15 mm) dia pipe.	R.ft	202.70
		Ru.m	665.01
2	Do. Do. 3/4 inch (20 mm) dia pipe (ILLM).	R.ft	246.70
		Ru.m	809.37
3	Do. Do. 1 inch (25 mm) dia pipe (ILLM).	R.ft	342.95
		Ru.m	1,125.15
4	Do. Do. 1-1/4 inches (32 mm) dia pipe (ILLM).	R.ft	448.50
		Ru.m	1,471.45
5	Do. Do. 1-1/2 inches (40 mm) dia pipe (ILLM).	R.ft	506.72
		Ru.m	1,662.46
6	Do. Do. 2inches (50 mm) dia pipe (ILLM).	R.ft	683.80
		Ru.m	2,243.43
7	Do. Do. 3 inches (80 mm) diapipe (ILLM).	R.ft	1,103.63
		Ru.m	3,620.82
8	Do. Do. 4 inches (100 mm) dia pipe (ILLM).	R.ft	1,564.43
		Ru.m	5,132.65
9	Do. Do. 5 inches (125 mm) dia pipe (ILLM).	R.ft	2,107.06
		Ru.m	6,912.92
10	Do. Do. 6 inches (150 mm) dia pipe (ILLM).	R.ft	2,693.45
		Ru.m	8,836.77

u.P.V.C PIPE (EXTERNAL) "E" CLASS
(Un platisized poly vinyle chloride)
SUB-HEAD CODE NO. 306

S.No.	Description	Unit	Rate in Rs.
11	Providing and fixing un platisized polyvinyl chloride pipe (u.P.V.C) "E" class with specials) and clamps etc., including cutting and fitting, complete with and including the cost of breaking through walls and roof and making good etc.; after cleaning the pipe and cartage within 10 miles (16.09 km) (working pressure 12 kg/cm^2): 3/4 inch (20 mm) dia.	R.ft	96.88
		Ru.m	317.86
12	Do. Do. 1 inch (25mm) dia.	R.ft	103.42
		Ru.m	339.32
13	Do. Do. 1-1/4 inch (32 mm) dia..	R.ft	127.54
		Ru.m	418.44
14	Do. Do. 1-1/2 inch (40 mm) dia..	R.ft	146.74
		Ru.m	481.42
15	Do. Do. 2 inches (50 mm) dia pipe..	R.ft	448.80
		Ru.m	1,472.45
16	Do. Do. 2-1/2 inches (65 mm) dia pipe..	R.ft	477.66
		Ru.m	1,567.13
17	Do. Do. 3 inches (80 mm) dia pipe..	R.ft	520.97
		Ru.m	1,709.21
18	Do. Do. 4 inches (100 mm) dia pipe.	R.ft	719.12
		Ru.m	2,359.32
19	Do. Do. 5 inches (125 mm) dia pipe..	R.ft	788.09
		Ru.m	2,585.59
20	Do. Do. 6 inches (150 mm) dia pipe...	R.ft	867.31
		Ru.m	2,845.49

u.P.V.C PIPE (EXTERNAL) "D" CLASS
SUB-HEAD CODE NO. 306

S.No.	Description	Unit	Rate in Rs.
21	Providing and fixing un platisized polyvinyl chloride pipe (P.V.C) "D" class and specials etc. including cutting and fitting complete with and including the cost of cutting trench upto 1-1/2 feet deep refilling, watering, ramming, and disposal of surplus earth within one chain and after cleaning the pipe and cartage within 10 miles (16.09 km.) (working pressure 12 kg/cm^2) 1-1/4 inches (32 mm) dia.	R.ft	139.09
		Ru.m	456.34
22	Do Do. 1-1/2 inches (40 mm) dia pipe..	R.ft	145.97
		Ru.m	478.89
23	Do Do. 2 inches (50 mm) dia pipe..	R.ft	434.72
		Ru.m	1,426.24
24	Do Do. 3 inches (80 mm) dia pipe..	R.ft	503.47
		Ru.m	1,651.79
25	Do Do. 4 inches (100 mm) dia pipe..	R.ft	600.01
		Ru.m	1,968.53
26	Do Do 5 inch (125 mm) dia pipe..	R.ft	665.21
		Ru.m	2,182.44
27	Do. Do. 6 inches (150 mm) diapipe.	R.ft	716.62
		Ru.m	2,351.12
28	Do. Do. 8 inches (200 mm) dia pipe.	R.ft	998.82
		Ru.m	3,276.97
	PPRC PIPE (INTERNAL)		
29	Providing and fixing PPRC pipe PN-20 with specials, and clamps etc, including cutting and fitting complete with and in-cluding the cost of breaking through walls and roof and making good etc; after cleaning the pipe and cartage within 10 miles 20mm dia	R.ft	153.45
		Ru.m	503.43
30	Providing and fixing PPRC pipe PN-20 with specials, and clamps etc, including cutting and fitting complete with and in-cluding the cost of breaking through walls and roof and making good etc; after cleaning the pipe and cartage within 10 miles 25mm dia	R.ft	215.32
		Ru.m	706.43
31	Providing and fixing PPRC pipe PN-20 with specials, and clamps etc, including cutting and fitting complete with and in-cluding the cost of breaking through walls and roof and making good etc; after cleaning the pipe and cartage within 10 miles 32mm dia	R.ft	320.26
		Ru.m	1,050.72

SUB-HEAD CODE NO. 306

S.No.	Description	Unit	Rate in Rs.
32	Providing and fixing PPRC pipe PN-20 with specials, and clamps etc, including cutting and fitting complete with and in-cluding the cost of breaking through walls and roof and making good etc; after cleaning the pipe and cartage within 10 miles 40mm dia	R.ft Ru.m	433.66 1,422.77
33	Providing and fixing PPRC pipe PN-20 with specials, and clamps etc, including cutting and fitting complete with and in-cluding the cost of breaking through walls and roof and making good etc; after cleaning the pipe and cartage within 10 miles 50mm dia	R.ft Ru.m	747.61 2,452.79
34	Providing and fixing PPRC pipe PN-20 with specials, and clamps etc, including cutting and fitting complete with and in-cluding the cost of breaking through walls and roof and making good etc; after cleaning the pipe and cartage within 10 miles 63mm dia	R.ft Ru.m	1,147.61 3,765.14
35	Providing and fixing PPRC pipe PN-20 with specials, and clamps etc, including cutting and fitting complete with and in-cluding the cost of breaking through walls and roof and making good etc; after cleaning the pipe and cartage within 10 miles 75mm dia	R.ft Ru.m	2,018.74 6,623.16
	Polyethylene pipe (HDPE) (PN-16) EXTRNAL		
36	Providing and fixing polyethylene pipe (HDPE) (PN-16) with specials including cutting and fitting complete and cartage within 10 miles 20mm e/d	R.ft Ru.m	76.92 252.36
37	Providing and fixing polyethylene pipe (HDPE) (PN-16) with specials including cutting and fitting complete and cartage within 10 miles 25mm e/d	R.ft Ru.m	109.28 358.51
38	Providing and fixing polyethylene pipe (HDPE) (PN-16) with specials including cutting and fitting complete and cartage within 10 miles 32mm e/d	R.ft Ru.m	161.25 529.04
39	Providing and fixing polyethylene pipe (HDPE) (PN-16) with specials including cutting and fitting complete and cartage within 10 miles 40mm e/d	R.ft Ru.m	240.00 787.40

SUB-HEAD CODE NO. 306

S.No.	Description	Unit	Rate in Rs.
40	Providing and fixing polyethylene pipe (HDPE) (PN-16) with specials including cutting and fitting complete and cartage within 10 miles 50mm e/d	R.ft	295.13
		Ru.m	968.26
41	Providing and fixing polyethylene pipe (HDPE) (PN-16) with specials including cutting and fitting complete and cartage within 10 miles 75mm e/d	R.ft	669.70
		Ru.m	2,197.16

BRASS AND GUN - METAL WATER FITTINGS
SUB-HEAD CODE NO. 307

S.No.	Description	Unit	Rate in Rs.
1	Providing and fixing 1/2 inches dia. (15 mm) brass bib cocks.	Each	755.40
2	Providing and fixing 1/2 inches dia. (15 mm) CP Bib cocks.	Each	1,130.40
3	Do. Do. 1/2 inches (15 mm) dia brass stop cocks.	Each	542.90
4	Do. Do. 1/2 inch (15 mm) dia CP stop cocks/ Tee Stop Cock.	Each	1,230.40
5	Do. Do. 4 inches (100 mm) dia shower rose (with detachable lid)..	Each	1,134.72
6	Providing and fixing CP Mixer 1/2 inch dia (15mm) (Faisal/Master or equivelent) lever type Pakistani complete in all respect.	Each	10,750.00
7	Providing and fixing 1/2 inches (15 mm) dia full way gun metal valves with wheels threaded or flanged ends with rubber washers, (standard pattern)..	Each	1,405.40
8	Do. Do. 3/4 inch (20 mm) dia Do..	Each	2,017.90
9	Do. Do. 1 inch (25 mm) dia Do...	Each	4,012.90
10	Do. Do. 1-1/4 inches (32 mm) dia Do..	Each	6,366.65
11	Do. Do. 1-1/2 inches (40 mm) dia Do..	Each	8,169.15
12	Do. Do. 2 inches (50 mm) dia Do..	Each	8,699.40
13	Do. Do. 2-1/2 inches (65 mm) dia Do...	Each	9,891.15
14	Do. Do. 3 inches (80 mm) dia Do..	Each	16,310.30
15	Do. Do. 4 inches (100 mm) dia Do..	Each	30,208.80
16	Do. Do. 6 inches (150 mm) dia Do..	Each	39,240.35
	BALL VALVES		
17	Providing and fixing 1/2 inch (15 mm) dia ball valve (with PVC Ball) made to B.S.S. 1212.....	Each	516.20
18	Do. Do. 3/4 inch (20 mm) dia Do.	Each	578.70
19	Do. Do. 1 inch (25 mm) dia Do..	Each	703.70
20	Do. Do. 1-1/4 inches (32 mm) dia Do..	Each	803.70
21	Do. Do. 1-1/2 inches (40 mm) dia Do.	Each	871.60
22	Do. Do. 2 inches (50 mm) dia Do..	Each	1,084.10
	BRASS FERRULE		
23	Providing and fixing brass ferrule including taping 3 inches (80 mm) dia C.I. main 1/2 inch (15 mm) dia.	Each	2,608.00
24	Do. Do. Do. 3/4 inches (20 mm) dia..................	Each	483.00
25	Do. Do. Do. 1 inch (25 mm) dia........................	Each	2,608.00

BRASS AND GUN - METAL WATER FITTINGS
SUB-HEAD CODE NO. 307

S.No.	Description	Unit	Rate in Rs.
	CONNECTION WITH THE EXISTING G.I. PIPE		
26	Making connection with the existing G.I. pipe upto 2 inches (50 mm) dia including cutting the pipe and providing and fixing necessary fittings.	Each	1,588.50
27	Making connection with the existing G.I. pipe of size larger than 2 inches to 6 inches (50 mm to 150 mm) dia. including cutting the pipe and providing and fixing necessary fittings.	Each	4,990.00

BRASS AND GUN - METAL WATER FITTINGS
SUB-HEAD CODE NO. 307

S.No.	Description	Unit	Rate in Rs.
	GUNMETAL NON-RETURN VALVES		
28	Providing and fixing gun-metal non-return valves with male and female ends as required. 1/2 inches (15 mm) dia..	Each	1,526.60
29	Do. Do. Do. 3/4 inches (20 mm) dia..................	Each	2,069.10
30	Do. Do. Do. 1 inch (25 mm) dia........................	Each	4,271.60
31	Do. Do. Do. 1-1/4 inches (32 mm) dia..............	Each	6,521.60
32	Do. Do. Do. 1-1/2 inches (40 mm) dia..............	Each	8,271.60
33	Do. Do. Do. 2 inches (50 mm) dia....................	Each	7,389.10
34	Do. Do. Do. 2-1/2 inches (65 mm) dia..............	Each	10,032.40
35	Do. Do. Do. 3 inches (80 mm) dia....................	Each	16,657.40
36	Do. Do. Do. 4 inches (100 mm) dia..................	Each	30,668.20

CHAMBERS FOR STOP COCK & HOUSE METRES
SUB-HEAD CODE (308)

S.No.	Description	Unit	Rate in Rs.
	COST IN SITU		
1	Providing chambers 9 inches x 6 inches (230 mm x 150 mm) (inside dimensions) x 24 inches or 610 mm deep for stop cocks and valves etc. with 6 inches thick C.C. 1:3:6 cast in situ walls, 6 inches (150 mm) thick C.C. 1:4:8 in foundation, 1/2 inch thick (13 mm) cement plaster 1:3 to all inside wall surfaces and to top 1 inch (25 mm) thick C.C. 1:2:4 flooring complete with hinged cast iron cover and frame 9 inches x 6 inches (230 mm x 150 mm) (inside) clear opening (wt=1/2 Qtr. or 6.35 kg) etc. fixed in cement concrete 1:2:4 including curing, excavation, back filling and disposal of surplus earth etc. complete.	Each	4,880.36
2	Providing chambers 15 inches x 9 inches (380 mm x 230 mm) (inside dimensions) x 24 inches (610 mm) deep for house meters with 6 inches (150 mm) thick C.C. 1:3:6 blocks sets in 1:6 C.M. 6" inches (150mm) C.C. 1:4:8 the foundation, 1/2" Thick (13mm cement plaster, 1:3: to all inside wall surfaces and to top, 1" inch (25mm thick), C.C. 1:2:4 flooring complete with hinged cast iron cover and frame 15 inches x 9 inches (360 mm x 230 mm) (inside) clear opening (wt =1 Qtr. or 12.7 kg) fixed in cement concrete 1:2:4 including curing excavation, back filling and disposal of surplus earth etc. complete.	Each	8,018.04
	BRICK MASONRY		
3	Providing chambers 9 inches x 6 inches or 230 mm x 150 mm (inside dimensions) x 24 inches (610 mm) deep for stop cocks and valves etc. with 4-1/2 inches (115 mm) thick burnt brick masonry walls in 1:6 C.M. 6 inches (150 mm) thick C.C. 1:4:8 in foundation, 1/2 inch (13 mm) thick cement plaster in 1:3 C.M. to all inside wall surfaces and to top, 1 inch (25 mm) thick C.C. 1:2:4 flooring complete with cast iron hinged cover and frame 9 inches x 6 inches or 230 mm x (150mm) inside clear opening (wt 1/2 Qtr.) (6.35 kg) fixed in cement concrete 1:2:4, including curing, excavation back filling and disposal of surplus earth etc. co mplete..	Each	4,621.10
4	Providing chambers 15 inches x 9 inches or 380 mm x 230 mm (inside dimensions) x 24 inches (610 mm) deep for house meters, with 4-1/2 inches (115 mm) thick, burnt brick masonry walls in 1:6 C.M, 6 inches (150 mm) C.C. 1:4:8 in foundation, 1/2 inch (13 mm) thick cement plaster in 1:3 C.M. to all inside wall surfaces and to top, 1 inch (25 mm) thick C.C. 1:2:4 flooring complete with cast iron hinged cover and frame 15 inches x 9 inches or 380 mm x 230 mm (inside) clear opening (wt = 1 Qtr. or 12.7 kg.) fixed in cement concrete 1:2:4 including curing, excavation back filling and disposal of surplus earth etc., complete..	Each	7,367.50

TANKS - MILD STEEL, R.C.C, G.I & FOOD GRADE POLYETHYLENE MATERIAL SUB HEAD CODE NO 309

S.No.	Description	Unit	Rate in Rs.
	MILD STEEL TANKS		
1	Providing and fixing 60 gallons (272 litres) net capacity tanks of 3/16 inches (4.8 mm) thick m.s. sheet complete with and including the cost of double electric welding the joints, C.I. mosquito proof cover and frame, (14 inches x 14 inches or 356 mm x 356 mm inside) overflow of the required size, 1-1/2 inches (40 mm) dia. scour pipe, holes for inlet and outlet, and fitting etc., including painting the tank inside with 2 coats of bitumen paint and out side two coats of white zinc paint with a pigment to match the colour of the building with a priming coat of red oxide (size 3 ft x 2 ft x 2 ft or 914 mm x 610 mm x 610 mm) including cartage within 10 miles (16.09 km.) and installing the tank in position..	Each	55,256.89
2	Do. 120 gallons (546 litters) net capacity tank Do. Do. Do. size 4ft x 3ft x 2 ft) or (1219 mm x 914 mm x 610 mm)..	Each	94,670.99
3	Do. Do. 180 gallons (818 litters) net capacity tank Do. Do. Do. (size 4 ft x 3 ft x 3 ft) or 1.22 M x 0.90 M x 0.91 M)..	Each	116,323.81
4	Do. Do. 240 gallons (1091 litters) net capacity tank Do. Do. Do. (size 4 ft x 4 ft x 3 ft. or 1.22 M x 1.22 M x 0.91 M)..	Each	126,959.69
5	Do. Do. 300 gallons (1364 litters) net capacity tank Do. Do. Do. (size 4 ft x 4 ft x 3-3/4 ft) or 1.22 M x 1.22 M x 1.14 M..	Each	137,841.68
6	Do. Do. 360 gallons (1636 litters) net capacity tank Do. Do. Do. (size 4-1/2 ft x 4 ft x 4 ft) or 1.37 mx 1.22 M x 1.22 M..	Each	160,579.40
7	Do. Do. 400 gallons (1818 litters) net capacity tank Do. Do. Do. (size 4-/12 ft x 4-1/2 ft x4 ft) or 1.37 Mx1.37Mx1.22M.	Each	177,748.20
8	Do. Do. 800 gallons (3636 litters) gross capacity tank Do. Do. Do. (size 8 ft x 4 ft x 4 ft) or 2.44 Mx1.22Mx1.22M..	Each	260,163.50
9	Do. Do. 1200 gallons (5455 litters) gross capacity tank Do. Do. Do. including the cost of angle iron 1-1/2 inches x 1-1/2 inches x 1/4 inch (40 mm x 40 mm x 6.4 mm) double electric welded to all sheets meeting at angles double welded to sheets flat iron 3 inch x 1/4 inch (76 mm x 6.4 mm) double welded to sheets meeting with butt ends jointed with double weld. size (12 ftx4 ft x 4 ft), or 3.66 mx 1.22 mx 1.22 M...	Each	422,465.81
10	Do. 1600 gallons (7274 litters) gross capacity tank Do. Do. Do. size (16 ft x 4 ft x 4 ft) or 4.88 M x 1.22 M x 1.22 M..	Each	531,024.26

TANKS - MILD STEEL, R.C.C, G.I & FOOD GRADE POLYETHYLENE MATERIAL SUB HEAD CODE NO 309

S.No.	Description	Unit	Rate in Rs.
	R.C.C. TANKS		
11	Constructing at site R.C.C tanks with 4" (100 mm) thick bottom, 4 inches (100 mm) thick walls and 3 inches (76 mm) thick top in cement concrete 1:2:4 using 1/4 inch (6.4 mm) to 3/4 inch (20 mm) stone ballast, finished with a floating coat of neat cement with 2 way reinforcement of steel I./e. 3/8 inch (9.5 mm) dia bars 6 inches (150 mm) centre to centre for top, C.I. cover and frame 14" x 14" (356 mm x356 mm) clear opening (wt. 2 Qtr. or 20.4 kg), 1-1/2 inches (40 mm) dia. scour pipe, and suitable size pipe for overflow and holes for inlet and outlet pipes of requisite sizes etc., complete. Tank size 3 ft x 2 ft x 2 ft or 914 mm x 610 mm x 610 mm) (inside) (net capacity 60 gallons or 272 litres)..	Each	26,273.93
12	Tank size 4 ft x 3 ft x 2 ft (1219 mm x 914 mm x 610 mm) (inside) (net capacity 120 gallons or 546 litres)....	Each	35,487.50
13	Tank size 4 ft x 3 ft x 3 ft. (1.22 m x 0.91 m x 0.91 m) (inside) (net capacity 180 gallons or 818 litres)..	Each	42,913.46
14	Tank size 4 ft x 4 ft x 3 ft. (1.22 m x 1.22 m x 0.91 m) (inside) (net capacity 240 gallons or 1091 litres).	Each	46,142.66
15	Tank size 4 ft x 4 ft x 3-3/4 ft. (1.22 m x 1.22 m x 1.14m) (inside) (net capacity 300 gallons or 1364 litres).	Each	51,203.41
16	Tank size 4-1/2 ft x 4 ft x 4 ft. (1.37 m x 1.22 m x 1.22m) (inside) (net capacity 360 gallons or 1636 litres)..	Each	55,729.54
17	Tank size 4-1/2 ft x 4-1/2 ft x 4 ft. (1.37 m x 1.37 m x 1.22 m) (inside) (net capacity 400 gallons or 1818 litres).	Each	62,411.74

TANKS - MILD STEEL, R.C.C, G.I & FOOD GRADE POLYETHYLENE MATERIAL SUB HEAD CODE NO 309

S.No.	Description	Unit	Rate in Rs.
	G.I. TANKS		
18	Providing and fixing 60 gallons (272 litres) net capacity tanks of 1/8 inch (3.2 mm) thick G.I. sheet complete with and including the cost of angle (1-1/4 inches x 1-1/4 inches x1/8 inches) (32 mm x 32 mm x 3.2 mm) iron frame, C.I. mosquito proof cover and frame, overflow of the required size, 1-1/2 inches (40 mm) dia. scour pipe, holes for inlet and outlet, and G.I. fitting for them including painting the tank inside with 2 coats of bitumen paint and outside 2 coats of white zinc paint with pigment to match the colour of the building with a priming coat of red oxide (size of tank 3 ft x 2 ft. x 2ft) or 914 mm x 610 mm x 610 mm including cartage within 10 miles (16.09 Km) and installing the tank in position.	Each	70,865.26
19	Do. Do. 120 gallons (546 litres) net capacity tanks Do. Do. Do. (size 4 ft x 3 ft x 2 ft. or 1219 mm x 914 mm x 61 Omm).	Each	103,834.04
20	Do. Do. 180 gallons (818 litres) net capacity tanks Do. Do. Do. (size 4 ft x 3 ft x 3 ft or 1.22m x 91m x 0.91m).	Each	126,094.67
21	Do. Do. 240 gallons (1091 litres) net capacity tank Do. Do. Do. (size 4 ft x 4 ft x 3 ft.) or 1.22m x 1.22 m x 0.91 m)..	Each	138,969.14
22	Do. Do. 300 gallons (1364 litres) net capacity tank Do. Do. Do. (size 4 ft x 4 ft x 3-3/4 ft. or 1.22 m x 1.22 m x 1.14 m)..	Each	151,580.30
23	Do. Do. 360 gallons (1636 litres) net capacity tank Do. Do. Do. (size 4-1/2ft x 4ft x 4ft or 1.37 mx1.22mx1.22 mm.	Each	175,584.85
24	Do. Do. 400 gallons (1818 litres) net capacity tank Do. Do; Do. (size 4-1/2 ft x 4-1/2 ft x 4ft) or 1.37m x 1.37 mx 1.22m)..	Each	185,745.05
25	Providing, fixing and cutting R.S. joist for tank including cutting holes in wall, making good and painting with red oxide 2 coats and cartage within 10 miles. (16.09 km.)..	Cwt 50kg.	19,110.00 18,808.20

TANKS - MILD STEEL, R.C.C, G.I & FOOD GRADE POLYETHYLENE MATERIAL SUB HEAD CODE NO 309

S.No.	Description	Unit	Rate in Rs.
	FOOD GRADE TANKS		
26	Providing and fixing water tank made of food grade polyethylene material 200 gallon (Supper tuff) i/c cost of specials and cartage upto site as per direction of Engineer in charge.	Each	11,062.50
27	Providing and fixing water tank made of food grade polyethylene material 300 gallon (Supper tuff) i/c cost of specials and cartage upto site as per direction of Engineer in charge.	Each	16,062.50
28	Providing and fixing water tank made of food grade polyethylene material 400 gallon (Supper tuff) i/c cost of specials and cartage upto site as per direction of Engineer in charge.	Each	20,437.50
29	Providing and fixing water tank made of food grade polyethylene material 500 gallon (Supper tuff) i/c cost of specials and cartage upto site as per direction of Engineer in charge.	Each	31,750.00
30	Providing and fixing water tank made of food grade polyethylene material 1000 gallon (Supper tuff) i/c cost of specials and cartage upto site as per direction of Engineer in charge.	Each	94,500.00
31	Providing and fixing water tank made of food grade polyethylene material 1500 gallon (Supper tuff) i/c cost of specials and cartage upto site as per direction of Engineer in charge.	Each	107,187.50

CAST IRON SLUICE VALVES
SUB-HEAD CODE 310

S.No.	Description	Unit	Rate in Rs.
1	Providing and fixing cast iron sluice valves with' flanged ends and two tail pieces to each valve complete with bolts and nuts, including the cost of insertion rubber washers (valves to stand test pressure head of 400 feet (122 m). 3 inches (80 mm) dia..	Each	7,961.40
2	Do. Do. 4 inches (100 mm) dia..	Each	10,236.40
3	Do. Do. 6 inches (150 mm) dia..	Each	12,516.80
4	Do. Do. 9 inches (230 mm) dia..	Each	24,422.20
5	Do. Do. 12 inches (305 mm) dia..	Each	32,477.60
6	Do. Do. 15 inches (380 mm) dia..	Each	50,714.10
7	Do. Do. 18 inches (460 mm) dia..	Each	82,772.80
8	Do. Do. 21 inches (535 mm) dia..	Each	123,591.00
9	Do. Do. 24 inches (610 mm) dia..	Each	155,845.00

CAST IRON REFLUX VALVES AND HYDRANTS

SUB-HEAD CODE 310

S.No.	Description	Unit	Rate in Rs.
	HYDRANTS		
10	Providing and fixing standard pattern fire hydrants (similar to C 29, glen field and Kennedy's catalogue) with 3 inches (80 mm) dia. inlet and 2-1/2 inches (65 mm) dia. screwed outlet complete with 1/8 inch (3.2 mm) thick rubber washer and nuts & bolts..	Each	2,441.34
11	Providing and fixing cast iron hydrant bend 3 inches (80 mm) dia. of short radius with integral flange on one end and other end with spigot...	Each	1,391.20
	VALVES		
12	Providing and fixing cast iron non-return or reflex valve with gun-metal working parts with hinged door, flanged ends and rubber washer and bolts and nuts. 3 inches (80 mm) dia. valve..	Each	9,711.40
13	Do. Do. 4inches (100 mm)dia. valve ..	Each	10,936.40
14	Do. Do. 6 inches (150 mm) dia. valve..	Each	11,466.80
15	Do. Do. 9 inches (230 mm) dia. valve..	Each	26,347.20
16	Do. Do. 12 inches (305 mm) dia. valve..	Each	70,129.60

CAST IRON FOOT VALVES
SUB-HEAD CODE 310

S.No.	Description	Unit	Rate in Rs.
17	Providing and fixing cast iron foot valve with flanged ends complete with a strainer suitable for fixing to 1 inch (25 mm) dia. suction pipe including 1/8 inches (3.2 mm) thick rubber washer...	Each	1,118.75
18	Do. Do. Do. to 1-1/2 inches (40 mm) dia..	Each	1,281.25
19	Do. Do. Do. to 2 inches (50 mm) dia..	Each	1,493.75
20	Do. Do. Do. to 3 inches (80 mm) dia..	Each	1,693.75
21	Do. Do, Do. to 4 inches (100 mm) dia..	Each	7,812.50
22	Do. Do. Do. to 5 inches (130 mm) dia..	Each	11,187.50
23	Do. Do, Do. to 6 inches (150 mm) dia..	Each	13,750.00

CHAMBERS FOR SLUICE VALVES
SUB-HEAD CODE 310

S.No.	Description	Unit	Rate in Rs.
	BLOCK MASONRY		
24	Providing chambers 2-1/3 ft x 1-1/2 ft or 685 mm x 460 mm (inside dimensions) x 4-1/2 ft (1372 mm) deep as per approved design for sluice valves 3 inches to 12 inches (80 mm to 305 mm) dia, with 18 inches (460 mm) dia, (inside) cast iron cover and frame (wt = 1 cwt. 3 qr. or 88.9 kg) fixed in R.C.C. 1:2:4 slab 4 inches (100 mm) thick (with 5 lbs.. of steel per CFT or 80.09 kg/cm.) 8 inches (205 mm) thick C.C. 1:3:6 block masonry walls set in 1:4 C.M., 6 inches (150 mm) thick C.C. 1:3:6 in foundation, 1/2 inches (13 mm) thick cement plaster 1:3 to all inside wall surfaces and to top. including providing and fixing C.I. foot rest at every one foot beyond 2-1/2 feet (765 mm) depth, curing, excavation, back filling and disposal of surplus earth etc. complete..	Each	45,496.64
25	Add for extra depth beyond 4-1/2 feet (1.37 m) including cost of C.I. foot rest for every one foot or 305 mm depth (for depths less upto than 4-1/2 feet or 1.37 m deduct at the same rate)..	Inch	347.40
		C.m.	136.77
26	Providing chambers 3-1/2 feet x 2-1/2 feet or 1.07 m x 0.75 m (inside dimension) x 7 feet (2.14 deep as per approved design for sluice valves 15 inches to 24 inches (380 mm to 610 mm) dia. with 24 inches (610 mm) dia. (inside) cast iron cover and frame (wt = 2 cwt. 2 Qtr. or 127 kg.) fixed in R.C.C. 1:2:4 slab, 6 inches (152 mm) (with 5 lbs.. steel per CFT. or 80.09 kg/cm) 8 inches (205 mm) thick C.C. 1:3:6 block masonry walls set in 1:6 C.M. 6 inches (150mm) thick in cement concrete 1:3:6 in foundation 1" inch (25mm) thick C. 1:2:4 flooring, 1/2 inch (13 mm) thick cement plaster 1:3 to all inside wall surfaces and to top including providing and fixing C.I. foot rest at every one foot beyond 2-1/2 feet (765 mm) depth curing, excavation, back filling and disposal of surplus earth etc., complete..	Each	52,100.06
27	Add for extra depth beyond 7 feet (2.14 m) including cost of C.I. foot rest at every one foot (305 mm) depth (for depth less than 7 feet or 2.14 m deduct at the same rate)...	Inch	455.44
		C.m.	179.31
28	Providing chambers 3-3/4 feet x 3-1/2 feet or 1.14 m x 1.07 m (inside dimensions) x 8 feet (2.44 m) deep as per approved design for sluice valves (27 inches to 30 inches or 686 mm x 762 mm) dia. (inside) cast iron cover and frame (wt = 3 cwt. or 152.4 kg.) fixed in R.C.C. 1:2:4 slab 6 inches (152 mm) thick (with 5 lbs.. steel per CFT or 80.09 kg/cm) 8 inches (205 mm) thick C.C. 1:3:6 block masonry walls set in 1:4 C.M., 6 inches (152 mm) thick C.C. 1:3:6 in foundation, 1 inch (25 mm) thick C.C. 1:2:4 flooring, 1/2 inch (13 mm) thick cement plaster 1:3 to all inside wall surfaces and to top, including providing and fixing C.I. foot rest at every one foot beyond 2-1/2 feet (762 mm) depth including cost of excavation, back filling and disposal of surplus earth etc. complete..	Each	82,842.85
29	Add for extra depth beyond 8 feet (2.44 m) including cost of C.I. foot rest at every one feet (305 mm) depth (for depths less than 8 feet or 2.44 m deduct at the same rate)...	Inch	462.42
		C.m.	182.05

SUB-HEAD CODE 310

S.No.	Description	Unit	Rate in Rs.
	BRICK MASONRY		
30	Providing chamber 2-1/2 feet x 1-1/2 feet or 765 mm x 460 mm (inside dimension) x 4-1/2 feet (1372 mm) deep as per approved design for sluice valve 3 inches to 12 inches (80 mm to 305 mm) dia. with 18 inches (460 mm) dia. (inside) cast iron cover and frame (wt. =1.3 Qtr. or 88.9 kg) fixed in R.C.C. 1:2:4 slab 4 inches (100 mm) thick (with 5 lbs. steel per Cft. or 80.09 kg/cm) 9 inches (229 mm) thick burnt brick masonry walls set in 1:6 C.M., 6 inches (152 mm) thick C.C. 1:3:6 in foundation, 1 inch (25 mm) thick C.C. 1:2:4 flooring 1/2 inch (13 mm) thick cement plaster 1:3 to all inside wall surfaces and to top, including providing and fixing C.I. foot rest at every one foot beyond 2-1/2 feet (765 mm) depth, curing, excavation, back filling and disposal of surplus earth etc. complete...	Each	95,500.63
31	Add for extra depth beyond 4-1/2 feet (1.37 M) including cost of C.I. foot rest for every 1 foot (305 mm) depth (for depth less than 4-1/2 feet or 1.37 M deduct at the same rate)...	Inch C.m.	601.71 236.90
32	Providing chambers 3-1 /2 feet x 3-1/2 feet or 1.07 m x 1.07 m (inside dimensions) x 7 feet (2.14 m)deep as per approved design for sluice valves 15 inches to 24 inches (380 mm to 610 mm) dia with 24 inches (610 mm) dia. (inside) cast iron cover and frame (wt = 2 cwt. 2 Qtr. or 127 kg.) fixed in R.C.C. 1:2:4, slab 6 inches (152 mm) thick (with 5 lbs. steel per Cft or 80.09 kg/cm) 9 inches (230 mm) thick burnt brick masonry walls set in 1:4 C.M., 6 inches (152 mm) thick C.C. 1:3:6 in foundation, 1 inch (25 mm) thick C.C. 1:2:4 flooring, 1/2 inch (13 mm) thick cement plaster 1:3 to all inside wall surfaces and to top including providing and fixing C.I. foot rest at every one foot beyond 2-1/2 feet (765 mm) depth, curing, excavation, back filling and disposal of surplus earth etc. complete...	Each	97,521.91
33	Add for extra depth beyond 7 feet (2.14 m) including cost of C.I. foot rest at every one foot (305 mm) depth (for depth less than 7 feet or 2.14 M deduct at the same rate)...	Inch C.m.	618.21 243.39
34	Providing chambers 3-3/4 feet x 3-1/2 feet or (1.14 m x 1.07 m inside dimensions) x 8 feet (2.44 m) deep as per approved design for sluice valves 27 inches to 30 inches (686 mm to 765 mm) dia, with 30 inches (686 mm) dia. (inside) cast iron cover and frame (wt = 3 Cwt. or 190.5 kg) fixed in R.C.C 1:2:4 slab 6 inches (152 mm) thick (with 5 lbs.. steel per CFT or 80.09 kg/cm) 9 inches (229 mm) thick burnt brick masonry walls set in 1:6 C.M., 6 inches (150mm) thick C.C. 1:3:6 in foundation 1" inch thick (25mm) C.C. 1:2:4 flooring, 1/2 inch (13 mm) thick cement plaster 1:3 to all inside wall surfaces and to top, including providing and fixing C.I. foot rest at every one foot (305 mm) beyond 2-1/2 feet (765 mm) depth, curing, excavation, back filling and disposal of surplus earth etc. complete...	Each	115,117.70
35	Add for extra depth beyond 8 feet (2.44 m) including cost of C.I. foot rest at every one foot (305 mm) depth, for depth less than 8 feet (2.44 m) deduct at the same rate..	Inch C.m.	701.52 276.19

R.C.C PIPES CLASS "B"
S.H - CODE NO. 311

S.No.	Description	Unit	Rate in Rs.
1	Providing R.C.C. pipes and collars of class 'B' and fixing in trench including cutting, fitting and jointing with maxphalt composition and cement mortar (1:1) and back filling the excavated material in trench including testing with water to a pressure head of 50 feet (15.24m) and cartage within 10 miles (16.09 km), for 4 inches (100 mm)dia. pipe..	R.ft.	247.66
		Ru.m	812.53
2	Do. Do. 6 inches (150 mm) dia. pipe..	R.ft.	358.99
		Ru.m	1,177.79
3	Do. Do.. 9 inches (230 mm) dia. pipe..	R.ft.	463.49
		Ru.m	1,520.62
4	Do. Do. 12 inches (305 mm) dia. pipe..	R.ft.	548.16
		Ru.m	1,798.43
5	Do. Do. 15 inches (380 mm) dia. pipe..	R.ft.	873.72
		Ru.m	2,866.53
6	Do. Do. 18 inches (460 mm) dia. pipe..	R.ft.	1,124.74
		Ru.m	3,690.10
7	Do. Do. 21 inches (535 mm) dia. pipe..	R.ft.	1,635.30
		Ru.m	5,365.16
8	Do. Do. 24 inches (610 mm) dia. pipe...	R.ft.	1,821.32
		Ru.m	5,975.46
9	Do. Do. 30 inches (765 mm) dia. pipe...	R.ft.	2,324.91
		Ru.m	7,627.66

R.C.C PIPES CLASS "C"
S.H - CODE NO. 312

S.No.	Description	Unit	Rate in Rs.
1	Providing R.C.C. pipes and collars of class 'C' and fixing in trench including cutting, fitting and jointing with maxphalt composition and cement mortar (1:1) and back filling the excavated material in trench including testing with water to a pressure head of 80 feet (25 m) and cartage within 10 miles (16.09 km.), 4 inches (100 mm) dia. pipe...	R.ft. Ru.m	284.77 934.29
2	Do. Do. 6 inches (150 mm)dia. pipe..	R.ft. Ru.m	363.33 1,192.02
3	Do. Do. 8 inches (200 mm) dia. pipe...	R.ft. Ru.m	444.54 1,458.47
4	Do. Do. 10 inches (250 mm) dia. pipe....	R.ft. Ru.m	593.18 1,946.11
5	Do. Do. 12 inches (305 mm) dia. pipe..	R.ft. Ru.m	674.52 2,213.00
6	Do. Do. 15 inches (380 mm) dia. pipe...	R.ft. Ru.m	943.91 3,096.80
7	Do. Do. 18 inches (460 mm) dia. pipe..	R.ft. Ru.m	1,186.69 3,893.33

DRAINAGE
SUB-HEAD CODE NO. 313

S.No.	Description	Unit	Rate in Rs.
1	Excavation in soft soils including lift up to 5 feet (1.52 m) and lead up to one chain (30.48 m).	%Cft Cu.m	1,425.27 503.33
2	Excavation in sandy soils including lift up to 5 feet (1.52 m) and lead up to one chain (30.48 m).	%Cft Cu.m	1,484.65 524.30
3	Excavation in hard soils including lift up to 5 feet (1.52 m) and lead up to one chain (30.48 m)..	%Cft Cu.m	1,544.02 545.27
4	Excavation in gravely soils including lift up to 5 feet (1.52 m) lead up to one chain (30.48 m)..	%Cft Cu.m	1,662.77 587.20
5	Excavation in all kinds of soil, murum, hard, average or soft including lift up to 5 feet (1.52 m) and lead up to one chain (30.48 m)..	%Cft Cu.m	1,840.90 650.11
6	Excavation in soft rock by hammering and chiseling including lift up to 5 feet (1.52 m) and lead up to one chain (30.48 m)..	%Cft Cu.m	4,387.08 1,549.28
7	Excavation in soft rock by blasting including lift up to 5 feet (1.52 m) and lead up to one chain (30.48 m).	%Cft Cu.m	2,478.29 875.20
8	Excavation in sandy or disintegrated rock by hammering and chiseling for foundation trenches including lift up to 5 feet (1.52 m) and lead up to one chain (30.48 m)..	%Cft Cu.m	4,148.50 1,465.03
9	Excavation in disintegrated rock by blasting including lift up to 5 feet (1.52 m) and lead up to one chain (30.48m)...	%Cft Cu.m	2,182.79 770.84

DRAINAGE - SUB-HEAD CODE NO. 313

S.No.	Description	Unit	Rate in Rs.
10	Excavation in hard rock by hammering and chiseling including sorting and stacking the excavated stuff in proper stacks within a lead of one chain (30.48 m) and lift up to 5 feet (1.52m)..	%Cft	10,142.25
		Cu.m	3,581.70
11	Excavation in hard rock by blasting including sorting and stacking the excavated stuff in proper stacks within a lead one chain (30.48 m) and lift up to 5 feet (1.52 m)...	%Cft	5,013.79
		Cu.m	1,770.60
12	Excavation in strata of compact conglomeration of boulders by hammering and chiseling including lift up to 5 feet (1.52 m) and lead up to one chain (30.38 m)...	%Cft	9,268.33
		Cu.m	3,273.08
13	Excavation in strata of compact conglomeration of boulder's by blasting including lift up to 5 feet (1.52 m) and lead up to one chain (30.48 m)..	%Cft	4,354.04
		Cu.m	1,537.61
14	Excavation in wet silt, clay or mud including lift up to 5 feet (1.52 m) and lead up to one chain (30.48 m)..	%Cft	2,139.12
		Cu.m	755.42
15	Add for additional lift of every three feet (0.91 m) or part thereof in items 1 to 14..	%Cft	237.50
		Cu.m	83.87
16	Add for additional lead of every one chain (30.48 m) or part thereof in items 1 to 14..	%Cft	237.50
		Cu.m	83.87
17	Bailing or pumping out sub-soil water during excavation or concreting etc. (trench volume below sub soil water level and concrete level respectively to be paid) once after final excavation and once after concreting...	%Cft	2,175.00
		Cu.m	768.09
18	Providing and fixing close timbering to trenches for depth up to 10 feet (3.48 m)...	%Cft	5,765.08
		Cu.m	620.55

DRAINAGE - SUB-HEAD CODE NO. 313

S.No.	Description	Unit	Rate in Rs.
19	Providing and fixing close timbering to trenches exceeding 10 feet (3.48 m) up to 20 feet (6.96 m)..	%Cft Cu.m	11,530.17 1,241.10
20	Providing and fixing open timbering to trenches for depth up to 10feet (3.48 m)...	%Cft Cu.m	2,882.78 310.30
21	Providing and fixing open timbering to trenches for depth exceeding 10 feet, (3.48 m) up to 20 feet (6.96 m)..	%Cft Cu.m	5,765.08 620.55
	Note : - In case where only one side of the trench needs timbering with supports 5/8th of the above rates shall be paid.		
22	Full hire charges of pumping set per day inclusive of the wages of driver and assistant, fuel or electric energy platforms required for placing pumps etc., at lower depths with suction and delivery pipes for pumping out water found at various depths from trenches, including the cost of erection and dismantling after completion of the job of above 10 h.p. from 10ft. (3.4 m) deep trench..	Day	1,500.00
23	Do. Do. from 15 feet (4.57 m) deep trench..	Day	1,500.00
24	Do. Do. from 20 feet (6.96 m) deep trench.	Day	1,500.00
25	Do. Do. of up to 10 h.p. from 10 feet (3.48 m) deep trench..	Day	1,500.00
26	Do. Do. from 15 feet (4.57 m) deep trench..	Day	1,500.00
27	Do. Do. from 20 feet (6.96m) deep trench.	Day	1,500.00
28	Filling and disposal of earth available at site.	% Cft Cu.m	1,095.00 386.70

GULLY TRAPS
SUB-HEAD CODE NO. 314

S.No.	Description	Unit	Rate in Rs.
1	Providing and fixing 6" x 4" (150 mm x 100 mm) cement concrete gully trap with 4 inches (100 mm) outlet, complete with 4 inches (100 mm) thick 1:2:4 cement concrete for bed and kerb, 1/2 inch ("13 mm) thick cement plaster 1:3 to the kerb, C.I. grating 6 inches x 6 inches (150 mm x 150 mm) and C.I. cover and frame 12" x 12" (305 mm x 305 mm) (inside) etc., complete..	Each	2,339.00
2	Do. Do. with RCC cover (12" x 12") (305 mm x 305 mm) 2 inches (50 mm) thick with handle. Do. Do.	Each	1,849.65
3	Providing and fixing 6" x 6" (150 mm x 150 mm) with 4 inches (100 mm) outlet cement concrete C.I. gully trap wt: 42 lbs. (19 kg.) complete with 4 inches thick (100 mm) 1:2:4 cement concrete for bed and kerb, 1/2 inch (13 mm) thick cement plaster (1:3) to the kerb, C.I. grating 6 inches x 6 inches (150 mm x 150 mm) and C.I. cover and frame 12 inches x 12 inches (305 mm x 305 mm) (inside) etc., complete...	Each	4,139.00
4	Do. Do. RCC cover (12" x 12") (305mm x 305mm) thick with handle...	Each	3,572.15

R.C.C. PIPE CLASS "A"
SUB-HEAD CODE NO. 314

S.No.	Description	Unit	Rate in Rs.
5	Providing RCC pipes and collars of class 'A' and fixing in trench including cutting, fitting and jointing with maxphalt composition and cement mortar (1:1) and testing with water to a head of 4 feet (1.22 m) above the top of the highest pipe including cartage within 10 miles (16.09 km.) 4 inches (100 mm) dia. pipe..	Rft.	198.26
		Ru.m	650.47
6	Do. Do. 6 inches (150 mm) dia. pipe..	Rft.	233.93
		Ru.m	767.47
7	Do. Do. 9 inches (230 mm) dia. pipe.	Rft.	390.49
		Ru.m	1,281.13
8	Do. Do. 12 inches (305 mm) dia. pipe.	Rft.	425.08
		Ru.m	1,394.63
9	Do. Do. 15 inches (380 mm) dia. pipe..	Rft.	516.06
		Ru.m	1,693.11
10	Do. Do. 18 inches (460 mm) dia. pipe...	Rft.	664.03
		Ru.m	2,178.57
11	Do. Do. 24 inches (610 mm) dia. pipe..	Rft.	879.35
		Ru.m	2,885.02
12	Do. Do. 27 inches (685 mm) dia. pipe..	Rft.	1,162.08
		Ru.m	3,812.61
13	Do. Do. 30 inches (765 mm) dia. pipe..	Rft.	1,469.93
		Ru.m	4,822.61
14	Do. Do. 33 inches (840 mm) dia. pipe..	Rft.	1,718.53
		Ru.m	5,638.22
15	Do. Do. 36 inches (910 mm) dia. pipe...	Rft.	1,956.45
		Ru.m	6,418.79
	VENTILATING SHAFT		
16	Providing and fixing 6 inches (150 mm) dia. W.I. pipe sewer ventilating shaft (40 feet or 12.19 m high from g.l.) and all specials required such as sockets, flanges, w.i. and c.i. radial tees, 6 inches x 6 inches x 6 inches (150 mm x 150 mm x 150 mm) etc, including cost of painting 2 coats of white zinc paint with pigment of approved shade, excavation, and masonry work as per type design...	Each	90,728.73

Note :- (6 inches or 150mm dia. underground connecting pipe to be paid sperately).

MAN HOLES SUB-HEAD CODE NO. 315

S.No.	Description	Unit	Rate in Rs.
	CEMENT CONCRETE BLOCK MASONRY		
1	Providing manhole type 'A' size 2 feet x 1-1/2 feet or (610 mm x 457 mm) (inside dimensions) x 2 feet (610 mm) deep as per approved design and specifications complete for 4 inches to 12 inches (100 to 305 mm) dia pipes up to 3 feet-11 inches (1.19 m) depth with cast iron cover and frame 16 inches (406 mm) dia, inside (weight=1 Cwt.1 Qtr.) or 63.5 kg. fixed in 4 inches (100 mm) thick RCC 1:2:4 slab, 8 inches (203 mm) thick c.c. 1:3:6 block masonry walls set in 1:3 c.m; 6 inches (150 mm) thick 1:3:6 c.c. in foundation 1:2:4 c.c. in benching, 1/2 inches (13 mm) thick cement plaster in 1:3 C.M. to all inside wall surface, channels and benching etc. and to top including making requisite umber of main and branch channels but excluding the cost of excavation back filling and disposal of excavated stuff, manhole cover and frame.	Each	10,617.49
2	Add for extra depth beyond 2 feet and up to 3 feet-11 inches (610 mm and up to 1194 mm) for 'A' type manholes (for depth lesser than 2 feet or 610 mm deduct at the same rate)..	Inch Cm.	200.16 508.41
3	Providing manhole type 'B' size 3 feet x 2-1/2 feet or 914 mm x 762 mm (inside dimensions) x 4 feet (1.22m) deep as per approved design and specifications complete 4 inches to 12 inches (100 mm to 305 mm) dia. pipes 4 feet to 7 feet-5 inches (1.22 m to 2.26 m) depth with cast iron cover and frame 18 inches (460 mm) dia. (inside) weight -1 Cwt. 3 Qtrs. (88.90 kg,) in 6 inches (150 mm) thick RCC 1:2:4 slab, 8 inches (203 mm) thick c.c. 1:3:6 block masonry walls set in 1:3 c.m. 6 inches (150mm) thick, 1:3:6, c.c in foundation 1:2:4 c.c in benching, 1/2 inch (13mm) thick cement plaster in 1:4 c.m. to all inside wall surfaces, channels and benching etc. and to top including providing and fixing cast iron foot rest at every foot of depth and making requisite number of main and branch channels complete but excluding the cost of excavation, back filing, disposal of excavated stuff manhole cover and frame.	Each	28,528.86
4	Add for extra depth beyond 4 feet and up to 7 feet -5 inches (1.22 m and up to 2.26 m) 'B' type manholes and including the cost of cast iron foot rest at every foot (305 mm) of depth, (for depth lesser than 4 ft. (1,22 m) deduct at same rate) ..	Inch Cm.	366.38 144.25

MAN HOLES SUB-HEAD CODE NO. 315

S.No.	Description	Unit	Rate in Rs.
5	Providing manholes type 'C' size 3 feet x 2-1/2 feet or 914 mm x 762 mm (inside dimensions) x 7-1/2 feet (2.28 m) deep as per approved design and specifications complete for 4 inches to 12 inches (100 mm to 300 mm) dia pipe 7 feet-6 inches to 12 Ft. (2.28 to 3.66 m) depth with cast iron cover and frame 18 inches (460 mm) dia. Inside weight=1 Cwt.3 Qrs. (88.90 kg.) fixed in 6 inches (150 mm) thick R.C.C. 1:2:4 Slab, 8 inches (203 mm) thick C.C. 1:3:6 block masonry walls sets in 1:3 C.M., 6 inches (152 mm) thick 1:3:6 C.C. in foundation 1:2:4 C.C. in benching, 1/2 inch (13 mm) thick C.P. in 1:4 Cu.m. to all inside wall surfaces channels and benching etc., and to top including providing and fixing cast iron foot rest at very foot of depth and making requisite number of main and branch channels but excluding the cost of excavation, back filling and disposal of excavated stuff, manhole cover and frame.	Each	44,833.26
6	Add for extra depth beyond 7-1/2 feet (2.28 m) and upto 12 feet (3.66 m) for 'C' type manholes including cost of cast iron foot rest at every foot of depth. (For depth lesser than 7-1/2 feet or 2.28 M deduct at the same rate)..	Inch Cm.	398.83 157.02
7	Providing manholes type 'D' size 4-1/2 feet x 3 feet (1.37 M x 0,91 M) at bottom and 4 feet x 2 feet (914 mm x 610 mm) at top (inside dimensions at both levels) and 13-1/2 feet (4.11 m) deep in all as per design and specifications complete for 6 inches to 15 inches (150 mm x 380 mm) dia. Pipes deeper than 12 ft. (3.66 M) and upto 20 feet. 6.10 m) depth with cast iron cover and frame 20 inches (508 mm) inside (weight-2 Cwt. or 101 kg.) fixed in 6 inches (150 mm) thick R.C.C. 1:2:4 slab and 7 inches (178 mm) thick R.C.C. slab and lintel 1:2:4 for supporting 8 inches (203 mm) thick C.C. 1:3:6 block masonry walls (8 inches or 203 mm thick masonry upto 7 feet-6 inches or 2.28 m depth from top and 16 inches or 406 mm thick masonry 6 feet high from bottom set in 1:4 C.M., 9 inches (229 mm) thick 1:3:6 C.C. in foundation, 1:2:4 C.C. in benching, 1/2 inch (13 mm) thick cement plaster in 1:3 C.M., to all inside wall surfaces, channels and benching etc. and to top including providing and fixing cast iron foot rest at every foot of depth and making requisite number of main and branch channels but excluding the cost of excavation, back filling and disposal of excavated stuff, manhole cover and frame.	Each	127,155.19
8	Add for extra 16 inches (406 mm) thick block masonry required for extra depth beyond 13 feet 6 inches (4.11 M) and upto 20 feet (6.10 m) for 'D' type manhole including cost of extra foot rest at every one foot (305 mm) of depth..	Inch Cm.	528.05 207.89

MAN HOLES SUB-HEAD CODE NO. 315

S.No.	Description	Unit	Rate in Rs.
9	Deduct for lesser depth than 13-1/2 feet (4.11 m) for 'D' type manhole effecting 8 inches (203 mm) thick block masonry and cast iron foot rest.....................	Inch	452.71
		Cm.	178.23
10	Providing manholes type 'E' size 4-1/2 feet x 4 feet (1.37 m x 1.22 m) at bottom and 3 feet x 2 feet at top (inside dimensions at both levels) and 14-1/2 feet (4.42 m) deep in all as per approved design and specifications complete for 18 inches to 24 inches (457 mm x 610 mm) dia. Pipe deeper than 12 ft. (3.66m and upto 20 feet (6.109 m) depth with cast iron cover and frame 20 inches (508 mm) dia. Inside (weight = 2 Cwt.) or 101.60 kg. fixed in 6 inches (150 mm) thick R.C.C 1:2:4 slab and 9 inches (229 mm) thick R.C.C. slab and lintel, 1:2:4 for supporting 8 inches (203 mm) thick C.C. block masonry; C.C. 1:3:6 block masonry walls 8 inches or 203 mm thick masonry upto 7 feet 6 inches or 2.13 m depth from top and 16 inches or 405 mm thick masonry 7 feet or 2.13m high from bottom) set in 1:4 C.M., and 9 inches (229 mm) thick 1:3:6 C.C. in foundations, 1:2:4 C.C. in benching, 1/2 inch (13 mm) thick cement plaster in 1:3 C.M., to all inside wall surfaces, channels and benching etc. and to top including providing and fixing cast iron foot rest at every foot of depth and making requisite number of main and branch channels but excluding the cost of excavation, back filling and disposal excluding cost of excavated stuff, manhole cover and frame.	Each	151,567.75
11	Add for extra depth of 16 inches (406 mm) thick block masonry beyond 14-1/2 feet (4.42 m) and upto 20 feet (6.10 m) for 'E' type manhole including cost of cast iron foot rest for every foot of depth.	Inch	560.49
		Cm.	220.67
12	deduct for lesser depth than 14-1/2 (4.42 m) for 'E' type manhole effecting 8 inches (203 mm) thick block masonry, plastering and cast iron foot rest..	Inch	420.27
		Cm.	165.46
	BURNT BRICK MASONRY		
13	Providing manhole type 'A' size 2 feet x 1-1/2 feet or 610 mm x 457 mm(inside dimensions) x 2 feet (610 mm) deep as per approved design and specifications complete for 4 inches to 12 inches (100 mm to 305 mm) dia. Pipes upto 3 feet-11 inches (1.19 m) depth with 16 inches (406 mm dia.) (inside) cast iron cover and frame (weight = 1 Cwt. 1. Qtr.) (63.5 kg.) fixed in R.C.C.1:2:4 slab 4 inches (102 mm)(thick, burnt brick masonry walls 9 inches (229 mm) thick set in 1:4 cement mortar, 6 inches (150 mm) 1:3:6 C.C. in foundation, 1:2:4 C.C. in benching and 1/2 inch (13 mm) thick cement plaster in 1:3 C.M., to all inside walls surfaces channels and benching etc., and to top including making requisite number of main and branches channels but excluding the cost of excavation, back filling and disposal of excavated stuff, manhole cover and frame.	Each	13,411.31
14	Add for extra depth beyond 2 feet (610 mm) and upto 3 feet-11 inches (1.19 M) for 'A' type manholes (for depth lesser than 2 feet or 610 mm deduct at the same rate)..	Inch	333.79
		Cm.	131.41

MAN HOLES SUB-HEAD CODE NO. 315

S.No.	Description	Unit	Rate in Rs.
15	Providing manhole type 'B' size 3 feet x 2-1/2 feet or 914 mm x 762 mm (inside dimensions) x 4 feet (1219 mm deep as per approved design and specifications complete for 4 inches to 12 inches (100 mm to 305 mm) dia. Pipe 4 feet to 7 feet-5 inches (1.22 m to 2.26m) depth with 18 inches (457 mm) dia. (inside) cast iron cover and frame (weights 1 Cwt. 3 Qrs.) or 88.9 kg, fixed in R.C.C.1:2:4 slab 6 inches (152 mm) thick, 9 inches (229 mm) thick burnt brick masonry walls set in 1:4 C.M., 6 inches (152 mm) thick 1:3:6 C,C. in foundation, 1:2:4 C.C. in benching and 1/2 inch (13 mm) thick cement plaster in 1:3 C.M., to all inside wall surfaces, channels and benching etc. and to top including providing and fixing cast iron foot rest at every foot of depth and making requisite number of main and branch channels but excluding the cost of excavation, back filling, disposal of excavated stuff, manhole cover and frame.	Each	31,974.81
16	Add for extra depth beyond 4 feet (1.22 m) and upto 7 feet-5 inches (2.26 m) for 'B' type manholes including cost of cast iron foot rest at every foot (305 mm) of depth (for depth lesser than 4 feet or 1.22 m deduct at the same rate)...	Inch Cm.	562.36 221.40
17	Providing manhole type 'C' size 3 feet x 2-1/2 feet (914 mm x 762 mm) (inside dimensions) 7-1/2 feet (2.28 m) deep as per approved design and specifications complete for 4 inches to 12 inches (100 mm to 305 mm) dia. Pipe 7 feet-6 inches to 12 feet (2.28 M to 3.66 m) depth with 18 inches (457 mm) dia. (inside) cast iron cover and frame (weight=1 cwt. 3 Qrs.) (88.90 kg.) fixed in R.C.C. 1:2:4 slab 6 inches (150 mm) thick, 9 inches (229 mm) thick burnt brick masonry walls set in 1:4 C.M., 6 inches (150 mm) thick 1:3:6 C.C. in foundation, 1:2:4 C.C. in benching and 1/2 inch(13 mm) thick cement plaster in 1:3 C.M., to all inside wall surfaces, channels and benching etc. and to top including providing and fixing cast iron foot rest at every foot of depth and making requisite number of main and branch channels but excluding the cost of excavation, back filling, disposal of excavated stuff, manhole cover and frame.	Each	57,971.16
18	Add for extra depth beyond 7-1/2 feet and upto 12 feet (2.28 m and upto 3.66 m) for 'C' type manholes including cost of cast iron foot rest at every feet (305 mm) of depth (for depth lesser than 7-1/2 feet or 2.28 M) deduct at same rate..	Inch Cm.	783.83 308.59

MAN HOLES SUB-HEAD CODE NO. 315

S.No.	Description	Unit	Rate in Rs.
19	Providing manhole type 'D' size 4-1/2 feet x 3 feet (1.37 m x 0.91 m) at bottom and 3 feet x 2 feet (914 mm x 610 mm) on top (inside dimensions at both levels) and 13-1/2 feet (4.11 m) deep in all as per approved design and specifications complete for 6 inches to 15 inches (150 mm to 380 mm) dia. Pipe deeper than 12 feet (3.66 m) and upto20feet (6.10 m) depth with cast iron cover and frame 20 inches (508 mm) dia. inside (weight=2 Cwt.) (101.60 kg.) fixed in 6 inches (150 mm) thick R.C.C. 1:2:4 slab and 7 inches (178 mm) thick R.C.C. slab and lintel 1:2:4 for supporting 9 inches (229 mm) thick burnt brick masonry; burnt brick masonry walls 9 inches or 229 mm thick masonry upto 7 feet-6 inches (2.28 m) depth from top and 18 inches (457 mm) thick masonry 6 feet (1.83 m) high from bottom) set in 1:4 C.M., 9 inches (229 mm) thick 1:3:6 C.C. in foundation, 1:2:4 C.C. in benching 1/2 inch (13 mm) thick cement plaster in 1:3 C.M., to all inside wall surfaces, channels and benching etc. and to top including providing and fixing cast iron foot rest at every foot (305 mm) of depth and making requisite number of main and branch channels but excluding the cost of excavation, back filling disposal of excavated stuff, manhole cover and frame.	Each	172,536.84
20	Add for extra 18 inches (457 mm) thick burnt brick masonry required for extra depth beyond 13 feet-6 inches and up to 20 feet (4.11 m and upto 6.10 m) for 'D' type manhole including cost of extra foot rest at every one foot of depth..	Inch Cm.	741.42 291.90
21	Deduct for lesser depth than 13-1/2 feet (4.11 m) for 'D' type manhole effecting 9 inches (229 mm) thick burnt brick masonry; plastering and cast iron foot rest..	Inch Cm.	483.04 190.17
22	Providing manhole type 'E' size 4-1/2 feet (1.37 m x 1.22 m) at bottom and 3 feet x 2 feet (914 mm x 610 mm) on top (inside dimensions at both levels) and 14-1/2 feet (4.42 m) deep in all as per approved design and specifications complete for 18 inches to 24 inches (460 mm to 610 mm) dia. Pipe deeper than 12 feet (3.66 m, and upto 20 feet (610 m) depth with cast iron cover and frame 20 inches (510 mm) dia. inside (weight=2 Cwt.) (101.60 kg.) fixed in 6 inches (150 mm) thick R.C.C. 1:2:4 slab and 9 inches (229 mm) thick R.C.C. slab and lintel 1:2:4 for supporting 9 inches(229 mm) thick burnt brick masonry; burnt brick masonry walls 9 inches (229 mm) thick upto 7 feet-6 inches (2.28 m) depth top and 18 inches (457 mm) thick masonry 7 feet (2.13 m) (from bottom) set in 1:4 C.M., to all inside wall surfaces, channels and benching etc. and to top including providing and fixing cast iron foot rest at every foot of depth and making requisite number of main and branch channels but excluding the cost of excavation, baand fixing cast iron foot rest at every foot (305 mm) of depth and m	Each	214,503.89

MAN HOLES SUB-HEAD CODE NO. 315

S.No.	Description	Unit	Rate in Rs.
23	Add for extra 18 inches (457 mm) thick burnt brick masonry required for extra depth beyond 14-1/2 feet (4.42 m) and upto 20 feet (6.10 m) for'E' type manhole including cost of extra foot rest at every foot (305 mm) of depth..	Inch	519.95
		Cm.	204.70
24	Deduct for lesser depth than 14-1/2 feet (4.42 m) for 'E' type manhole effecting 9 inches (229 mm) thick burnt brick masonry, plastering and cast iron foot rest....	Inch	741.42
		Cm.	291.90
25	Providing & fixing C.I Cover & Frame 16" dia (406 mm) weight 1 cwt 1 Qtr (63.50 Kg.)	Each	22,876.56
26	Providing & fixing C.I Cover & Frame 18" dia (460 mm) weight 1 cwt 3 Qtr (88.90 Kg.)	Each	25,630.00
27	Providing & fixing C.I Cover & Frame 24" dia (610 mm) weight 2 cwt 2 Qtr (127.00 Kg.)	Each	36,631.25
28	Providing & fixing C.I Cover & Frame 30" dia (765 mm) weight 3 cwt (152.41 Kg.)	Each	43,965.00
29	Providing & laying R.C.C 1:2:4 slab cover 3" thick average (pre-cast complete with M.S angle iron frame, M.S bars embedded in concrete) of any shape including the cost of reinforcement and welding etc. as per direction of Engineer Incharge.	Cft.	2,274.73
		Cum.	80,331.38

MISCELLANEOUS
SUB-HEAD CODE 316

S.No.	Description	Unit	Rate in Rs.
1	Providing platforms 4 feet x 4 feet (1.22 m x 1.22 m) inside in 1-1/2 inches thick fine cement concrete over 4 inches (100 mm) thick cement concrete 1:2:4, kerb in cement concrete 1:2:4 and 1/2 inch (13 mm) thick cement plaster 1:3 cement mortar all over and to walls upto a height of 2 feet-6 inches (765 mm) if near a wall..	Each	5,784.00
2	Providing platform 3 feet x 3 feet (0.91 m x 0.91 m) inside in 1-1/2 inches (40 mm) thick fine cement concrete over 4 inches (100 mm) thick cement concrete 1:2:4 kerb in cement concrete 1:2:4 and 1/2 inch (13 mm) thick cement plaster 1:3 C.M., all over and to walls upto a height of 2 feet-6 inches (765 mm) if near a wall..	Each	3,737.88
3	Making sunk floor complete 1-1/2 feet x 1-1/2. feet (458 mm x 458 mm) with C.C. !:2:4..	Each	2,849.75
4	Applying two coats of aluminum paint Jenson and Nicholson or its equivalent standard if directed by Engr. In-charge in approved shade over and including priming coat..	Sft. Sq.m	36.07 388.30
5	Applying two coats of anti corrisive bitumen paint of approved quality on iron work pipe etc..	Sft. Sq.m	24.79 266.78
6	Providing and wrapping tightly round pipes upto 6 inches (150 mm) dia Hessian soaked in bitumen paint of approved quality...	Rft. Ru.m	24.28 79.65
7	Making open drains 4 inches (100 mm) dia. semicircular bottoms and vertical sides upto 12 inches (305 mm) deep with cement concrete 1:2:4 of 3/4 inch (20 mm) crushed stones in foundation and sides and 1/2 inch (13 mm) thick cement plaster 1:3 cement mortar including making channel etc. complete...	Rft. Ru.m	763.82 2,505.97
8	Making open drains 6 inches (150 mm) dia. Semicircular bottoms and vertical sides upto 18 inches (457 mm) deep with cement concrete 1:2:4 of 3/4 inch (20 mm) crushed stones in foundation and sides and 1/2 inch 13 mm thick cement plaster 1:3 cement mortar including making channel etc., complete..	Rft. Ru.m	830.90 2,726.05
9	Cutting holes in walls 18 inches and 16 inches (457 mm and 406 mm) thick and making them good in cement concrete 1:2:4....	Each	1,377.13

MISCELLANEOUS - SUB-HEAD CODE 316

S.No.	Description	Unit	Rate in Rs.
10	Cutting holes in walls 12 inches (305 mm) thick and making them good in cement concrete 1:2:4..	Each	1,143.38
11	Cutting holes in walls 9 inches and 8 inches (229 mm and 203mm) thick and making them good in cement concrete 1:2:4..	Each	1,010.88
12	Cutting holes in walls 6 inches and 4 inches (150 mm and 100 mm) thick and making them good in cement concrete 1:2:4...	Each	866.50
13	Making connection with the existing manhole including the cost of cutting holes in walls, making them good in cement concrete 1:2:4 and .making the required channel etc., complete	Each	750.00
14	Providing foot rest 12 inches x 8 inches-x 2 inches (305 mm x 203 mm x 51 mm) in fine cement concrete 1:2:4 with 3/8 inches (9.5 mm) stone ballast and with 1/4 inch (6.4 mm) semicircular thick cement plaster (1:3) C.M. with 1/8 inch (3.2 mm) float on all surfaces (for squatting type W.C. pans)..	Pair	828.24

Note.- Provision of cutting holes and making them good (required for sanitary fittings and pipe work of all sorts has already been made in the rate of the items under the different sub-heads. The holes in this sub-head shall be paid only in cases where they are meant for any other purpose.

LABOUR RATES: (SANITARY FITTINGS)
SUB-HEAD CODE 317

S.No.	Description	Unit	Rate in Rs.
1	Fixing a squatting type W.C. pan set consisting of a flushing cistern, a flush pipe and a trap including cutting and making the requisite number of holes in walls, plinth and floors and making good in 1:2 :4 C.C.	Each	2,977.60
2	Fixing European type W.C. pan set consisting of flushing cistern, a flush pipe including cutting and making the requisite number of holes in walls, plinth and floors and making good in 1:2:4 C.C...	Each	2,983.00
3	Fixing a flat back lipped front urinal basin set consisting of a flushing cistern, flush pipe, waste pipe including cutting and making the requisite number of holes in walls plinth and floors and making good in 1:2:4 C.C.	Each	3,028.15
4	Fixing single urinal stall set consisting of flushing cistern, flush pipe, trap including cutting and making the requisite number of holes in walls, plinth and floors' and making good in 1;2:4 C.C..	Each	4,243.73
5	Fixing two stall urinal set consisting of auto-flushing cistern, flush pipe trap including cutting and making the requisite number of holes in walls, plinth and floors and making good in 1:2:4 C.C..	Each	4,268.03
6	fixing three stall urinal set consisting of auto-flushing cistern, flush pipe, trap including cutting and making the requisite number of holes in walls, plinth and floors and making good in 1:2:4 C.C..	Each	7,334.52
7	Fixing four stall urinal set consisting of auto-flushing cistern, flush pipe, trap including cutting and making the requisite number of holes in walls, plinth and floors and making good in 1:2:4 C.C..	Each	8,535.52
8	Fixing lavatory basin of sizes with taps, traps and brackets etc., complete including labour of connecting up waste and water pipe and including cutting and making the requisite number of holes in walls, plinth and floors and making good in 1:2:4 C.C..	Each	3,009.25
9	Fixing bath tubs of sizes with taps, waste and overflow pipe, chain including cutting and making the requisite number of holes in walls, plinth and floors and making good in 1:2:4 C.C...	Each	4,187.78
10	Fixing sink of sizes with brackets, brass-waste, trap, chain .and plug including cutting and making the requisite number of holes in walls, plinth and floors and making good in 1:2:4 C.C.	Each	3,017.35
11	Fixing draining board of sizes with brackets etc., complete.	Each	794.25
12	Fixing floor traps of sizes with gratings including cutting and making the requisite number of holes in walls, plinth and floors and making good in 1:2:4 C.C..	Each	788.31

LABOUR RATES: FIXING C.I. SOIL, WASTE & VENT PIPES & SPLS SUB-HEAD CODE NO. 318

S.No.	Description	Unit	Rate in Rs.
1	Fixing including, cutting fitting and extra painting 4 inches (100 mm) dia. C.I. soil waste and vent pipes and cartage with 10 miles (16.09 kg).	R.ft	53.52
		Ru.m	175.60
2	Fixing specials of 4 inches (100 mm) dia. C.I. soil waste and vent pipes with access doors, rubber washers and extra painting to match the colour of the building and cartage within 10 miles (16.09km)..	Each	124.75
3	Fixing plain specials of 4 inches (100 mm) dia. C.I. soil waste and vent pipes including extra painting to match the colour of the building and cartage with 10 miles (16.09 km)..	Each	81.00
4	Fixing including cutting, fitting and extra painting 3 inches (80 mm) dia. C.I. soil waste and vent pipes and cartage with 10 miles (16.09 km).	R.ft	60.79
		Ru.m	199.43
5	Fixing specials of 3 inches (80 mm) dia. C.I. soil and vent pipes with access door, rubber washers and extra painting to match the colour of the building and cartage within 10 miles (16.09 km)..	Each	128.80
6	Fixing specials (plain) of 3 inches (80 mm) dia. C.I. soil waste and vent pipes including extra painting to match the colour of the building and cartage within 10 miles (16.09 km).	Each	85.05
7	Fixing including cutting, fitting and extra painting 2 inches (50 mm) dia. C.I. soil, waste and vent pipe and cartage within 10 miles (16.09 km)..	R.ft	51.00
		Ru.m	167.33
8	Fixing specials of 2 inches (50 mm) dia. C.I. soil waste and vent pipes with access door, rubber washers and extra painting to match the colour of the-building and cartage within 10 miles (16.09 km).	Each	122.05
9	Fixing specials (plain) of 2 inches (50 mm) dia. C.I. soil, waste and vent pipes including extra painting to match the colour of the building and cartage within 10 miles (16.09 km)..	Each	78.30

LABOUR RATES FOR WATER SERVICES (INTERNAL)

S. H. CODE NO. 319

S.No.	Description	Unit	Rate in Rs.
1	Fixing including, cutting and fitting G.I. pipes, specials and clamps etc., including the cost of specials, clamps, and breaking through, walls and roof and making good etc., painting 2 coats after cleaning the pipe etc., with white zinc paint with pigment to match the colour of the Bldg. and testing with water to a pressure head of 200 feet (61 m) and Cartage within 10 miles (16.09 Km) 1/2" (13mm) dia file...	R.ft	48.22
		Ru.m	158.21
2	Do. Do. 3/4 inch (20 mm).	R.ft	57.08
		Ru.m	187.28
3	Do. Do. 1 inch (25 mm).	R.ft	66.04
		Ru.m	216.67
4	Do. Do. 1-1/4 inch (32 mm).	R.ft	78.86
		Ru.m	258.74
5	Do. Do. 1-1/2 inch (40 mm).	R.ft	80.71
		Ru.m	264.80
6	Do. Do. 2 inch (50 mm).	R.ft	81.83
		Ru.m	268.46
7	Do. Do. 2-1/2 inch (65 mm).	Rft.	84.30
		Ru.m	276.56
8	Do. Do. 3 inch (80 mm).	R.ft	86.23
		Ru.m	282.92
9	Do. Do. 4 inch (100 mm).	R.ft	191.89
		Ru.m	629.57
10	Do. Do. 6 inch (150 mm).	R.ft	234.28
		Ru.m	768.63

LABOUR RATES FOR WATER SERVICES (EXTERNAL)
S. H. CODE NO. 320

S.No.	Description	Unit	Rate in Rs.
1	Fixing including cutting and fitting G.I. pipes and specials including the cost of specials, cutting trench up to 2-1/2 feet (762 mm) deep, refilling, watering, ramming and disposal of surplus earth within one chain, painting 2 coats with bitumen paint to pipes and specials after cleaning and hessian cloth soaked in maxphalt composition warped tightly round pipes and testing to a pressure head of 200 feet (61 m) and cartage within 10 miles (16.09 km) 1/2 inch (13 mm) dia. pipe.	R.ft	54.41
		Ru.m	178.52
2	Do. Do. 3/4 inch (20 mm) dia..	R.ft	54.42
		Ru.m	178.55
3	Do. Do. 1 inch (25 mm) dia..	R.ft	55.07
		Ru.m	180.68
4	Do. Do.... 1-1/4 inch (32 mm) dia.	R.ft	70.34
		Ru.m	230.76
5	Do. Do. 1-1/2inch (40mm) dia..	R.ft	71.71
		Ru.m	235.26
6	Do. Do. 2inch (50 mm) dia..	R.ft	74.25
		Ru.m	243.61
7	Do. Do. 2-1 /2inch (65 mm) dia..	R.ft	77.50
		Ru.m	254.27
8	Do. Do. 3 inch (80 mm) dia..	R.ft	107.09
		Ru.m	351.36
9	Do. Do. 4 inch (100 mm) dia..	R.ft	106.58
		Ru.m	349.66
10	Do. Do. 6 inch (150 mm) dia..	R.ft	134.92
		Ru.m	442.64

LABOUR RATES FOR R.C.C. PIPES CLASS "B"
SUB-HEAD CODE NO. 321

S.No.	Description	Unit	Rate in Rs.
1	Fixing pipes and specials of R.C.C. class " B " in trench including cutting and fitting, jointing with maxphalt composition and cement mortar (1:1) and testing with water to a head of 50 feet (15.25 m) and cartage within 10 miles (16.09 km) 4 inches (100 mm) dia. pipe.	R.ft	72.66
		Ru.m	238.40
2	Do. Do. 6 inches (150 mm)..	R.ft	108.99
		Ru.m	357.60
3	Do. Do. 9 inches (230 mm)..	R.ft	163.49
		Ru.m	536.40
4	Do. Do. 12 inches (305 mm)..	R.ft	175.55
		Ru.m	575.95
5	Do. Do. 15 inches (380 mm)..	R.ft	261.22
		Ru.m	857.06
6	Do. Do. 18 inches (460 mm)..	R.ft	315.99
		Ru.m	1,036.77
7	Do. Do. 21 inches (535 mm)..	R.ft	366.55
		Ru.m	1,202.65
8	Do. Do. 24 inches (610 mm)..	R.ft	421.32
		Ru.m	1,382.36
9	Do. Do. 30 inches (765 mm)..	R.ft	483.66
		Ru.m	1,586.89

LABOUR RATES FOR R.C.C. PIPES CLASS "C"
SUB-HEAD CODE NO. 322

S.No.	Description	Unit	Rate in Rs.
1	Fixing pipes and specials of R.C.C. class " C " in trench including cutting and fitting, jointing with maxphalt composition and cement mortar (1:1) and testing with water to a head of 80 feet (24.4 m) and cartage within 10 miles (16.09 km) 4 inches (100 mm) dia. pipe.	R.ft	72.66
		Ru.m	238.40
2	Do. Do. 6 inches (150 mm).	R.ft	75.71
		Ru.m	248.40
3	Do. Do. 8 inches (205 mm).	R.ft	145.32
		Ru.m	476.80
4	Do. Do; 10 inches (225 mm)...	R.ft	181.65
		Ru.m	595.99
5	Do. Do. . 12 inches (305 mm)..	R.ft	203.16
		Ru.m	666.57
6	Do. Do; 15 inches (380 mm)...	R.ft	251.92
		Ru.m	826.55

LABOUR RATES FOR R.C.C. PIPES CLASS "A"
SUB-HEAD CODE NO. 323

S.No.	Description	Unit	Rate in Rs.
1	Fixing pipes and specials of R.C.C. class ' A ' in trench, including cutting and fitting jointing with maxphalt composition and cement mortar (1:1) and testing with water to a head of 4 feet (1.22m) above the top of the heighest pipe & cartage with 10 miles (16.09 k.m. 73 inch (50mm) dia pipe..	Rft.	72.66
		Ru.m	238.40
2	Do. Do. 6 inches (150 mm)...	Rft.	108.99
		Ru.m	357.60
3	Do. Do. 9 inches (230 mm)..	Rft.	163.49
		Ru.m	536.40
4	Do. Do. 12 inches (305 mm)..	Rft.	210.66
		Ru.m	691.18
5	Do. Do. 15 inches (380 mm)..	Rft.	261.22
		Ru.m	857.06
6	Do. Do. 18 inches (460 mm)..	Rft.	315.99
		Ru.m	1,036.77
7	Do. Do. 24 inches (610 mm)..	Rft.	338.12
		Ru.m	1,109.37
8	Do. Do. 27 inches (685 mm).	Rft.	369.66
		Ru.m	1,212.86
9	Do. Do. 30 inches (765 mm)...	Rft.	384.45
		Ru.m	1,261.38
10	Do. Do. 33 inches (840 mm)...	Rft.	453.45
		Ru.m	1,487.77
11	Do. Do. 36 inches (915 mm)...	Rft.	595.56
		Ru.m	1,953.95

BASIC RATES OF MATERIALS

Code 130

PAKISTAN PUBLIC WORKS DEPARTMENT

BASIC RATES OF MATERIALS - 2022

Sub-Head Code-130

Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS

N.B. These rates are exclusive of Contractor's profit.

R1174	Alubond USA aluminum composite panels (Cladding) 4mm thick	1270.00	Sft	13665.20	Sq.m.
22344	12mm thick glass i/c 5% wastage	580.00	P.Sft	6240.80	Sq.m
22346	3mm safety film 175 micron	190.00	Sft	2044.40	Sq.m
2069	A.C. (F.C) bend of reqd. degree 4" = 100 mm dia.	320.00	Each	320.00	Each
0620	A.C. (F.C) bldg. & sanitary pipe along with sockets : internal dia 3" = 0.8 mm dia.	260.00	Rft.	852.80	Ru.m
0622	A.C. (F.C) bldg.. & sanitary pipe along with sockets : internal dia 4" = 100 mm dia.	432.00	Rft.	1416.96	Ru.m
0623	A.C. (F.C) bldg.. & sanitary pipe along with sockets : internal dia 5" =127 mm dia.	680.00	Rft.	2230.40	Ru.m
0624	A.C. (F.C) bldg.. & sanitary pipe along with sockets : internal dia 6" = 152 mm dia.	793.00	Rft.	2601.04	Ru.m
2078	A.C. (F.C) closer piece, partly corrugated, partly flat..	240.00	Each	240.00	Each
2079	A.C. (F.C) corner piece 8 ft. x 12" = (244 cm x 30 cm).	3696.00	Each	3696.00	Each
2082	A.C. (F.C) Pipe dia 2" = 51 mm, 6' = 1.83 m long.	188.00	Rft.	616.64	Ru.m
2084	A.C. (F.C) Pipe dia 4" = 102 mm, rain water pipe.	297.00	Rft.	974.16	Ru.m
0615	A.C. (F.C) pipes 10' = 3 m long with sockets : internal dia 3" = 80 m dia.	2600.00	Each	2600.00	Each
0616	A.C. (F.C) pipes 10' = 3 m long with sockets : internal dia 4" = 100 mm dia.	3780.00	Each	3780.00	Each
0618	A.C. (F.C) pipes 13' = 4 m long with sockets internal dia 6" =152 mm dia .	8616.00	Each	8616.00	Each
0608	A.C. (F.C) pressure pipes : class B, C & D 3" = 80 mm dia.	232.00	Rft.	760.96	Ru.m
0609	A.C. (F.C) pressure pipes : class B, C & D 4" = 100 mm dia.	330.00	Rft.	1082.40	Ru.m
0612	A.C. (F.C) pressure pipes : class B, C & D 6" = 152 mm dia.	582.00	Rft.	1908.96	Ru.m
2077	A.C. (F.C) Ridges finials, two pieces adjustable (other than grey colour).	795.00	Pair	795.00	Pair
2076	A.C. (F.C) Ridges finials, two pieces adjustable, (Grey colour).	795.00	Pair	795.00	Pair
2073	A.C. (F.C) Ridges two pieces close fitting or plain wing adjustable 5/32"(4 mm) thick.	1088.00	Pair	1088.00	Pair
2081	A.C. (F.C) Barge board large sec sheets 8' x 3-3/4" (2.43 m x 94 mm).	1244.00	Pair	1244.00	Pair
2080	A.C. (F.C) Barge board-cum-corner, piece = 2.44 m long.	375.00	Pair	375.00	Pair
2087	A.C. (F.C) bend 90 degree dia 4" = 102 mm.	700.00	Pair	700.00	Pair

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0619	A.C. (F.C) building & sanitary pipe along with sockets : internal dia 2-1/2" = 65 mm dia.	230.00	Rft.	754.40	Ru.m
2095	A.C. (F.C) head 3" dia.	265.00	Each	265.00	Each
2096	A.C. (F.C) head 4"dia (100 mm) dia..	425.00	Each	425.00	Each
2088	A.C. (F.C) offset: dia 3" = 76 mm' for rain water pipe.	288.00	Each	288.00	Each
2089	A.C. (F.C) offset: dia 4" = 102 mm, for rain water pipe.	345.00	Each	345.00	Each
2083	A.C. (F.C) Pipe dia 3" = 76 mm, rain water pipe.	260.00	Rft.	852.80	Ru.m
2090	A.C. (F.C) Plain Sheet 1/4" (6.4 mm) thick.	130.00	Sft	1398.80	Sq.m
2072	A.C. (F.C) Ridge two pieces close fitting or plain wing adjustable 1/4" (6.4 mm) thick.	1390.00	Pair	1390.00	Pair
2075	A.C. (F.C) Ridges plain angular one pair 1/4" (6.4 mm) thick.	370.00	Each	370.00	Each
2085	A.C. (F.C) Shoe dia 3" = 76 mm.	260.00	Each	260.00	Each
2086	A.C. (F.C) Shoe dia 4" = 102 mm.	270.00	Each	270.00	Each
2071	A.C. (F.C) Valley gutters in two feet long pieces size 12" x 18" = 305 mm x 457 mm.	1382.00	Each	1382.00	Each
2070	A.C. (F.C) Valley gutters in two feet long pieces size 9" x 6" (230 mm x 152 mm).	1700.00	Each	1700.00	Each
0828	A.C. (F.C) Bend 45 degrees internal dia = 100 mm thickness = 8 mm	650.00	Each	650.00	Each
0829	A.C. (F.C) Bend 45 degrees internal dia = 150 mm thickness = 10 mm	1040.00	Each	1040.00	Each
0826	A.C. (F.C) Bend 45 degrees internal dia = 60 mm thickness = 7 mm..	413.00	Each	413.00	Each
0827	A.C. (F.C) Bend 45 degrees internal dia = 80 mm thickness = 8 mm.	416.00	Each	416.00	Each
0812	A.C. (F.C) Bend 90 degrees internal dia = 100 mm thickness = 8 mm	1000.00	Each	1000.00	Each
0813	A.C. (F.C) Bend 90 degrees internal dia = 150 mm thickness = 10 mm	1100.00	Each	1100.00	Each
0810	A.C. (F.C) Bend 90 degrees internal dia = 60 mm thickness = 7 mm	390.00	Each	390.00	Each
0811	A.C. (F.C) Bend 90 degrees internal dia = 80 mm thickness = 8 mm	410.00	Each	410.00	Each
0820	A.C. (F.C) Hexagonal rain water head internal dia = 100 mm, thickness = 8 mm	5440.00	Each	5440.00	Each
0821	A.C. (F.C) Hexagonal rain water head internal dia = 150 mm, thickness = 10 mm	500.00	Each	500.00	Each
0818	A.C. (F.C) Hexagonal rain water head internal dia = 60 mm, thickness = 7 mm ..	390.00	Each	390.00	Each
0819	A.C. (F.C) Hexagonal rain water head internal dia = 80 mm, thickness = 8 mm ..	460.00	Each	460.00	Each
0824	A.C. (F.C) junction (double equal) internal dia = 100 mm, thickness = 8 mm	450.00	Each	450.00	Each
0825	A.C. (F.C) junction (double equal) internal dia = 150 mm, thickness = 10 mm.	1100.00	Each	1100.00	Each

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0823	A.C. (F.C) junction (double equal) internal dia = 80 mm, thickness = 8 mm	440.00	Each	440.00	Each
0822	A.C. (F.C) Junction 45 degree (double equal) internal dia = 60 mm, thickness = 8 mm	410.00	Each	410.00	Each
0840	A.C. (F.C) junction 45 degree (single equal) internal dia = 100 mm, thickness = 8 mm	440.00	Each	440.00	Each
0841	A.C. (F.C) junction 45 degree (single equal) internal dia = 150 mm, thickness = 10 mm .	1100.00	Each	1100.00	Each
0838	A.C. (F.C) junction 45 degree (single equal) internal dia = 60 mm, thickness = 7 mm ..	390.00	Each	390.00	Each
0839	A.C. (F.C) junction 45 degree (single equal) internal dia = 80 mm, thickness = 8 mm..	440.00	Each	440.00	Each
0975	A.C. (F.C) Plain sheet (4'x 4' = 1.2 m x 1.2 m) 1/4" = 6 mm thick .	1400.00	Each	1400.00	Each
0848	A.C. (F.C) plug bend P.C. internal dia = 100 mm thickness = 8 mm.	950.00	Each	950.00	Each
0846	A.C. (F.C) plug bend P.C. internal dia = 60 mm thickness = 7 mm.	800.00	Each	800.00	Each
0847	A.C. (F.C) plug bend P.C. internal dia = 80 mm thickness = 8 mm.	850.00	Each	850.00	Each
0851	A.C. (F.C) Plug Tee P.C. internal dia = 100 mm thickness = 8 mm.	1000.00	Each	1000.00	Each
0849	A.C. (F.C) Plug Tee P.C. internal dia = 60 mm thickness = 7 mm.	800.00	Each	800.00	Each
0850	A.C. (F.C) Plug Tee P.C. internal dia = 80 mm thickness = 8 mm.	940.00	Each	940.00	Each
0836	A.C. (F.C) shoe bend 90 degree internal dia = 100 mm, thickness = 8 mm	440.00	Each	440.00	Each
0837	A.C. (F.C) shoe bend 90 degree internal dia = 150 mm, thickness = 10 mm.	1100.00	Each	1100.00	Each
0834	A.C. (F.C) shoe bend 90 degree internal dia = 60 mm, thickness = 7 mm.	410.00	Each	410.00	Each
0835	A.C. (F.C) shoe bend 90 degree internal dia = 80 mm, thickness = 8 mm.	440.00	Each	440.00	Each
0844	A.C. (F.C) swan neck internal dia = 100 mm thickness = 8 mm.	650.00	Each	650.00	Each
0842	A.C. (F.C) swan neck internal dia = 60 mm thickness = 7 mm.	540.00	Each	540.00	Each
0843	A.C. (F.C) swan neck internal dia = 80 mm thickness = 8 mm.	580.00	Each	580.00	Each
0832	A.C. (F.C) Tee junction, (double equal) internal dia = 100 mm, thickness = 8 mm.	580.00	Each	580.00	Each
0833	A.C. (F.C) Tee junction, (double equal) internal dia = 150 mm, thickness = 10 mm.	1690.00	Each	1690.00	Each
0830	A.C. (F.C) Tee junction, (double equal) internal dia = 60 mm, thickness = 7 mm.	440.00	Each	440.00	Each
0831	A.C. (F.C) Tee junction, (double equal) internal dia = 80 mm, thickness = 8 mm.	520.00	Each	520.00	Each

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0816	A.C. (F.C) Tee junction, (single equal) internal dia . = 100 mm, thickness = 8 mm.	520.00	Each	520.00	Each
0817	A.C. (F.C) Tee junction, (single equal) internal dia = 150 mm, thickness = 8 mm.	1380.00	Each	1380.00	Each
0814	A.C. (F.C) Tee junction, (single equal) internal dia = 60 mm, thickness = 7 mm.	440.00	Each	440.00	Each
0815	A.C. (F.C) Tee junction, (single equal) internal dia = 80 mm, thickness = 8 mm.	520.00	Each	520.00	Each
0100	Accelerating agent ...	850.00	IMGL	186.98	Liter
0511	Acid resistant paint.	1620.00	IMGL	356.36	Liter
1215	Acoustic tiles for false ceiling 24" x 24" = 610 x 610 mm coloured.	565.00	Each	565.00	Each
1216	Acoustictiles for false ceiling 12" x 12" = 305 x 305 mm coloured.	215.00	Each	215.00	Each
1234a	Acrylic based Marble chips coating.	28.00	Sft	301.28	Sq.m.
0007	Adhesive for pvc tiles.	1225.00	IMGL	269.47	Liter
0008	Adhesive for rubber tiles.	1225.00	IMGL	269.47	Liter
0006	Adhesive No 70 (for jutoid matting).	50.00	Lbs	110.13	Kg
R1117	Aggregate 1-1/2" - 3/4"	50.00	P.Cft	50.00	P.Cft
R1113	Aggregate 2" -1-1/2"	50.00	P.Cft	50.00	P.Cft
R1106	Aggregate 3/4" - 3/8"	55.00	P.Cft	55.00	P.Cft
R1122	Aggregate 3/4" - 3/8"	55.00	P.Cft	55.00	P.Cft
R1118	Aggregate 3/4" - 4"	60.00	P.Cft	60.00	P.Cft
R1119	Aggregate 3/8" - No.4	60.00	P.Cft	60.00	P.Cft
R1107	Aggregate No.4 - No.200	35.00	P.Cft	35.00	P.Cft
R1120	Aggregate No.4 - No.200	40.00	P.Cft	40.00	P.Cft
510	Alkali Resisting paint..	2070.00	IMGL	455.35	Liter
22225	Alpha Lock (Japan) aluminum door heavy.	1420.00	Each	1420.00	Each
2353	Alum..	35.00	Lbs	77.09	Kg
2036a	Aluminium "U" 3/4" size.	40.00	Rft.	131.20	Ru.m
2103	Aluminium Angle/Tee 3/8" x 3/8" x 3/32" ' 9.5 mm x 9.5 mm x 2.4 mm.	45.00	Rft.	147.60	Ru.m
2068	Aluminium Angles 1" x 1" x 1/8" = (25 mm 25 mm x 3 mm).	80.00	Rft.	262.40	Ru.m
al028	Aluminium Angles 1-1/2" x 1-1/2" x 1/8" = (38 x 38 mm x 3 mm).	120.00	Rft.	393.60	Ru.m
2104	Aluminium Anodized Sheet.	250.00	Sq.ft.	2690.00	Sq.m
2098	Aluminium Beading (Plain) 1" x 3/32" = 25 mm x 2.4 mm.	35.00	Rft.	114.80	Ru.m
2102	Aluminium Beading: Striped Anodised & Bevelled 1" x 2/32" = 25 mm x 1.6 mm ...	45.00	Rft.	147.60	Ru.m
2101	Aluminium Beading: Striped Anodised & Bevelled 1-1/2" = 38 mm.	52.00	Rft.	170.56	Ru.m
2031	Aluminium Flat of sizes.	210.00	Lbs	462.56	Kg
0222a	Aluminium foil 4mm thick Ezogrip	90.00	Sft.	968.40	Sq.m.
2105	Aluminium Guide Channel.	240.00	Rft.	787.20	Ru.m
2037	Aluminium Nosing 2" = 52 mm wide, 1/8" 3.2 mm thick (ribbed).	210.00	Lbs	462.56	Kg
0488	Aluminium Paint (Dual container).	3970.00	IMGL	873.30	Liter

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
2107	Aluminium Sashes : Fixed Alminium Beads.	400.00	Sq.ft.	4304.00	Sq.m
R1181	Aluminum conventional system curtain wall	2790.00	Sft	30020.40	Sq.m.
22226	Aluminum fully glazed bronze anodized Aluminum hinged door with frame of 3" width ALCOP (Delux model) not less than 2mm without glass.	900.00	Sft.	9684.00	Sq.m
22227	Aluminum Hinged door with frame powder coating (Delux Model) 3" wide 2 mm thick without glass.	925.00	Sft.	9953.00	Sq.m
2108	Aluminum Sashes : Partly Hung and Partly Fixed Aluminium Beads without glass (Delux)..	725.00	Sq.ft.	7801.00	Sq.m
2100	Aluminum sheet 1/8" = 3 mm thick (striped andodised).	810.00	Sq.ft.	8715.60	Sq.m
0981	Aluminum Sheet..	540.00	Lbs	1189.43	Kg
2109	Aluminum single leaf (economy) fixed fan or skylight 3" wide & more then 1.5 mm with Aluminium fitting without glass / Lock. (ALCOP).	800.00	Sq.ft.	8608.00	Sq.m
2110	Aluminum single leaf hung fan or skylight 3" wide & more then 1.5 mm with aluminum fitting without glass / lock (Deluxe) (ALCOP).	870.00	Sq.ft.	9361.20	Sq.m
1261	Aluminum sliding door, delux modle (ALCOP) 4" inch wide & 2 mm thick including all fitting without glass & lock.	950.00	Sq.ft.	10222.00	Sq.m
2112	Aluminum striped channel 5/8" x 1/8" = 15.62 mm x 3.12 mm.	64.00	Rft.	209.92	Ru.m
2113	Aluminum striped channel 7/8" x 7/16" = 22 mm x 11 mm.	90.00	Rft.	295.20	Ru.m
2036	Aluminum strips 1-1/2" = 38 mm wide, 1/8" = 3.2 mm thick.	300.00	Lbs	660.79	Kg
1145	Aluminum swing door deluxe model (ALCOP) 4" inch wide & 2 mm thick including all fitting without glass & lock.	1000.00	Sq.ft.	10760.00	Sq.m
22228	Aluminum swing door double action bronze anodized ALCOP (Delux Model) 4" wide 2 mm thick without glass.	1150.00	Sft.	12374.00	Sq.m
22229	Aluminum swing door with frame double action powder coated (Delux Model) 4" wide 2 mm thick without glass.	1200.00	Sft.	12912.00	Sq.m
0588	Aluminum Tubes : 1" = 25 mm..	140.00	Rft.	459.20	Ru.m
0586	Aluminum Tubes : 1/2" = 13 mm.	85.00	Rft.	278.80	Ru.m
0587	Aluminum Tubes : 3/4" = 19 mm.	100.00	Rft.	328.00	Ru.m
22230	Aluminum window/vent: bronze anodized ALCOP (Delux Model) 4" wide 2 mm thick partly fixed and partly sliding without glass.	900.00	Sft.	9684.00	Sq.m
22231	Aluminum window/vent: powder coated partly fixed and partly sliding. (Delux Model) 4" wide 2 mm thick without glass.	950.00	Sft.	10222.00	Sq.m
2106	Aluminum Windows : double leaf hung 4" inch wide & 2 mm thick with accessories but not glass nor lock (delux) (ALCOP)..	1050.00	Sq.ft.	11298.00	Sq.m

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
2111	Aluminum Windows : partly fixed partly hung 4" inch wide & 2 mm thick with aluminum fitting & with glass (delux) (ALCOP).	1150.00	Sq.ft.	12374.00	Sq.m
2015	Anchorage cone with Ancrite including wastage 1-1/2" cable (38 mm)..	3800.00	Each	3800.00	Each
2014	Anchorage Cone with ancrite including wastage 4-1/2 inch cable (4-13 mm).	15309.00	Each	15309.00	Each
2013	Anchorage Cone with ancrite including wastage 7-1/2 inch cable (7-13 mm).	28950.00	Each	28950.00	Each
1950	Anchorage Cone with ancrite, crips, including wastage, cost of 12, 1/2 inch cable (12 - 13 mm).	60000.00	Each	60000.00	Each
2018	Anchorage coupler for 1-1/2" cable.	8790.00	Each	8790.00	Each
2017	Anchorage coupler for 4-1/2" cable.	19200.00	Each	19200.00	Each
2016	Anchorage coupler for 7-1/2" cable.	28950.00	Each	28950.00	Each
2363	Anchorage couplers 12-1/2" cable.	58650.00	Each	58650.00	Each
0512	Anti corrosive bitumastic paint.	2000.00	IMGL	439.95	Liter
0497	Anti fouling tropical composition.	3000.00	IMGL	659.92	Liter
0495	Anticorrosive composition red (superior quality).	2850.00	IMGL	626.92	Liter
0496	Anticorrsive composition red (ordinary quality).	2600.00	IMGL	571.93	Liter
0498	Antj fouling super tropical composition.	2500.00	IMGL	549.93	Liter
22341	Ash wood 1st quality	7500.00	Cft	264900.00	Cu.m
0127	Asphalt emulsion.	1400.00	IMGL	307.96	Liter
R1138	Asphalt felt 3 Ply	50.00	P.Sft	50.00	P.Sft
R1108	Asphalt Grade 60/70	98000.00	P.Ton	98000.00	P.Ton
R1149	Asphalt Grade 80/100	92500.00	P.Ton	92500.00	P.Ton
1934	Asphalt liquid (cut back).	92500.00	Ton	90650.00	Tonne
R1124	Asphalt M.C 250	106600.00	P.Ton	106600.00	P.Ton
R1103	Asphalt M.C 70	107430.00	P.Ton	107430.00	P.Ton
R1129	Asphalt R.C 250	106600.00	P.Ton	106600.00	P.Ton
R1096	Asphalt R.C 70	107920.00	P.Ton	107920.00	P.Ton
R1105	Asphalt R.S.I	95500.00	P.Ton	95500.00	P.Ton
R1125	Asphalt S.S.1	100660.00	P.Ton	100660.00	P.Ton
2397	Back Glazing.	25.00	Rft.	82.00	Ru.m
0082	Bag old. (Jute).	100.00	Each	100.00	Each
1979	Bamboo 3" = 80 mm, dia length 12 Rft. = 3.65 M.	35.00	Rft.	114.80	Ru.m
0037	Bamboo dia 1" = 25 mm, Length 7 ft. = 2.13 M.	90.00	Each	90.00	Each
0038	Bamboo dia 1-1/2" = 38 mm, length 10 ft. = 3.50 M.	225.00	Each	225.00	Each
0039	Bamboo dia 2" = 52 mm, length 10 ft. = 3.50 M.	300.00	Each	300.00	Each
2041	Bamboo dia 2-1/2" = 64 mm, 9' = 2.7 M long.	70.00	Rft.	229.60	Ru.m
0040	Bamboo dia 3" = 80 mm, length 12 ft. = 3.65 M.	550.00	Each	550.00	Each
0041	Bamboo dia 3-1/2" to 4" = 89 mm to 100 mm length 18 Ft. 5.49 M.	900.00	Each	900.00	Each
0042	Bamboo dia 3-1/2" to 4" = 89 mm to 100 mm lenth 25 Ft. = 7.62 M.	1250.00	Each	1250.00	Each
0043	Bamboo dia 3-1/2" to 4-1/2" = 89 mm to 114 mm length 30 Ft. 9.14 M.	1500.00	Each	1500.00	Each
2040	Bamboo dia 4" = 102 mm, 9', 2.7 M long	50.00	Rft.	164.00	Ru.m

BASIC RATES OF MATERIALS - 2022

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
22232	Bamboo ladder 10 feet	1500.00	Each	1500.00	Each
22233	Bamboo ladder 16 feet	2400.00	Each	2400.00	Each
22234	Bamboo ladder 20 feet	3000.00	Each	3000.00	Each
22235	Bamboo ladder 25 feet	3750.00	Each	3750.00	Each
0576	Bar iron (M.S) of sizes	9652.00	Cwt.	9500.00	50kg.
0574	Bar soap.	76.00	Lbs	167.40	kg
1288	Barbed wire 6" = 152 mm c/c points (2345 Rft. in one Cwt.) 14 gauge.	11450.00	Cwt.	11269.69	50kg.
1287	Barbed wire 6° =152 mm c/c (1410 Rft. in one Cwt.) 12 gauge.	9147.00	Cwt.	9002.95	50kg.
1036	Barge board cum-corner piece, 96" -2.46 m long.	2170.00	Each	2170.00	Each
0503	Barico paint (for steel).	3150.00	IMGL	692.92	Liter
22236	Bathroom latch set No. 0223 (CP)	1225.00	Each	1225.00	Each
0561	Be'gari or gum.	180.00	Lbs	396.48	kg
1965	Benches : Marbe mosaic size 5-1/2" x 1-1/2" x 1-1/4' (167 cm x 45 cm x 38 cm).	15000.00	Each	15000.00	Each
1944	Benches wooden: cost of	10000.00	Each	10000.00	Each
R1142	Bentonite Powder	25.75	P.kg	25.75	P.kg
0044	Bhoosa first class quality.	750.00	Mnd.	1004.72	50kg.
0045	Bhoosa second class quality.	550.00	Mnd.	736.79	50kg.
w123	Binding wire.	77.13	Lbs.	169.89	Kg.
22237	Bit 1' long Imported.	1000.00	Each	1000.00	Each
0046a	Bituflex.	56.71	Lbs.	124.91	Kg.
0046	Bitumen (straight run) 80/100 or any paving grade.	92500.00	Ton	90650.00	Tonne
0489	Bitumen Aluminium paint.	3150.00	IMGL	692.92	Liter
1929	Bitumen cold sticker.	4250.00	Cwt.	4183.07	50kg.
0453	Bitumen compound.	5336.00	Cwt.	5251.97	50kg.
1928	Bitumen emulsion.	95000.00	Ton	93	kg
1928a	Bitumen emulsion.	42.41	lbs	93.41	kg
0047	Bitumen No 3 or 4.	6352.08	Cwt.	6252.05	50kg.
1937	Bitumen washers.	325.00	Grs.	325.00	Grs.
2030	Bitumen water proof paper.	125.00	Sq.Yd.	149.50	Sq.m
1939	Bitumen.	40.82	Lbs	89.91	kg
1938	Bitumen.	4572.00	Cwt.	4500.00	50kg.
0490	Black bituminous paint	2400.00	IMGL	527.94	Liter
0508	Black Japan paint.	1350.00	IMGL	296.96	Liter
0546	Black oxide (superior quality).	15245.00	Cwt.	15004.92	50kg.
0547	Black oxide.	11434.00	Cwt.	11253.94	50kg.
R1088	Blasting Material	290.00	Lbs	638.77	kg
0564	Bleaching powder.	175.00	Lbs	385.46	kg
0552	Blue paste.	400.00	Lbs	881.06	kg
2029	Board: Fibre, thickness 1/2" = 13mm.	320.00	Sq.ft.	3443.20	Sq.m
2028	Board: Fibre, thickness 1/4" = (6.4 mm).	250.00	Sq.ft.	2690.00	Sq.m
2027	Board: Gypsum, thickness 1/2" = 13 mm.	85.00	Sq.ft.	914.60	Sq.m
2025	Board: Gypsum, thickness 1/4" = 6.4 mm .	45.00	Sq.ft.	484.20	Sq.m
2026	Board: Gypsum, thickness 3/8" = 9.5 mm.	60.00	Sq.ft.	645.60	Sq.m
2022	Board: Hard masonite thickness 1/8" = .	25.00	Sq.ft.	269.00	Sq.m
22238	Board: lamination formica laminated wooden sheet.	90.00	Sq.ft.	968.40	Sq.m

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
2023	Board: Plain particle: 600 Kg density.	9860.00	% Sft.	1061.32	Sq.m
2024	Board: Plastic Formica, laminated.	100.00	Sq.ft.	1076.00	Sq.m
2021	Board: Plastic laminated, 3.2 mm.	100.00	Sq.ft.	1076.00	Sq.m
2020	Board: Teak imported veneered, 1/8" (3 mm) thickness.	100.00	Sq.ft.	1076.00	Sq.m
537	Boiled linseed oil.	1550.00	IMGL	340.96	Liter
2045	Bolts & Nuts dia 1/2" = 12 mm, 9" long = 229 mm.	250.00	Each	250.00	Each
2064	Bolts & Nuts Dia 1/4" = 6.4 mm, 1-1/2" long = 38 mm.	300.00	Doz.	300.00	Doz.
2044	Bolts Sheets: Galvanized Iron size 3/4" x , 1/4" = 19 mm x 6.4 mm.	540.00	Grs.	540.00	Grs.
2043	Bolts Sheets: Galvanized Iron size 5/16" x 4-1/2" = 8 mm x 112 mm long.	1500.00	Grs.	1500.00	Grs.
2046	Bolts Sliding Brass 10" x 5/8" = 254 mm x 16 mm.	2000.00	Each	2000.00	Each
2054	Bolts Sliding Brass, chromium plated 6" x 1/2" = 152 mm x 13 mm.	1400.00	Each	1400.00	Each
2052	Bolts Sliding Brass, chromium Plated: 10" x 5/8" = 254 mm x 16 mm.	2100.00	Each	2100.00	Each
2051	Bolts Sliding Brass, chromium Plated: 12" x 5/8" = 305 x 16 mm ..	2600.00	Each	2600.00	Each
2050	Bolts Sliding Oxidized Brass 6" x 1/2" = 152" x 305 mm.	1300.00	Each	1300.00	Each
2048	Bolts Sliding Oxidized Brass, 10" x 5/8" = 254 mm x 16 mm.	1700.00	Each	1700.00	Each
2047	Bolts Sliding Oxidized Brass, 12"x 3/4" = 305 mm x 16 mm.	2400.00	Each	2400.00	Each
2056	Bolts sliding Oxidized Iron 10" x 5/8" = 254 mm x 6 mm.	450.00	Each	450.00	Each
2058	Bolts Sliding Oxidized Iron 6" x 1/2" = 152 mm x 13 mm.	350.00	Each	350.00	Each
2057	Bolts Sliding Oxidized Iron 9" x 5/8" = 229 , mm x 16 mm.	450.00	Each	450.00	Each
2049	Bolts Sliding Oxidized Iron 9" x 5/8" 229 mm x 16 mm.	450.00	Each	450.00	Each
2055	Bolts Sliding Oxidized Iron, 12" x 3/4" = 305 mm x 12 mm.	600.00	Each	600.00	Each
2039	Bolts, Nuts, Hooks: Galvanized Iron of size 5/16" x 4-1/2" = 8 mm x 114 mm long.	2310.00	Grs.	2310.00	Grs.
2059	Bolts: Ancher	7622.50	Cwt.	150.04	kg
2053	BoltsSliding Brass, Chromium plated 9 x 5/8"= 230 x 6 mm.	2100.00	Each	2100.00	Each
2034	Boring, fitting & charges of brass strainer 1-1/2" = 38 mm dia.	220.00	Rft.	721.60	Ru.m
2033	Boring, fitting and fixing charges of brass strainer 2" = 52 mm dia.	250.00	Rft.	820.00	Ru.m
1058	Boulders 4 inches to 3 inches (102 mm to 76 mm) size.	2100.00	% Cft	742.05	P. Cu.m.
1059	Boulders 6" = 152 mm size.	1800.00	% Cft	636.04	P. Cu.m.
1061	Boulders 9" = 229 mm and down gauge.	1600.00	% Cft	565.37	P. Cu.m.

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0583	Brass (Chromium plated) tubes: 1/2" = 13,mm.	300.00	Rft.	984.00	Ru.m
0585	Brass (Chromium plated) tubes: 1" = 25 mm	900.00	Rft.	2952.00	Ru.m
0584	Brass (Chromium plated) tubes: 3/4"=19 mm.	500.00	Rft.	1640.00	Ru.m
0152	Brass (Oxidized) handles 4" = 102 mm..	2200.00	Doz.	2200.00	Doz.
0151	Brass (Oxidized) handles 5" = 127 mm.	2520.00	Doz.	2520.00	Doz.
0150	Brass (Oxidized) handles 6" = 152 mm..	2750.00	Doz.	2750.00	Doz.
0187	Brass butt hinges (c.p.) 1" = 26 mm size.	1920.00	Doz.	1920.00	Doz.
0186	Brass butt hinges (c.p.) 2" = 152 mm size..	2160.00	Doz.	2160.00	Doz.
0185	Brass butt hinges (c.p.) 5" = 127 mm size..	3600.00	Doz.	3600.00	Doz.
0175	Brass butt hinges (heavy oxidized) 6" x 1-1/2" x 2/16" = 152 mm x 38 mm x 5 mm.	3120.00	Doz.	3120.00	Doz.
0173	Brass butt hinges (heavy type) 2" x 11/16"x 3/16" = 52 mm x 17 mm x,5 mm..	1440.00	Doz.	1440.00	Doz.
0172	Brass butt hinges (heavy type) 3" x 1" x 3/16" = 80 mm x 26 mm x 5 mm.	1680.00	Doz.	1680.00	Doz.
0171	Brass butt hinges (heavy type) 4" x 1-1/2" x 5/32" = 100 x 38 x 4 mm.	1920.00	Doz.	1920.00	Doz.
0170	Brass butt hinges (heavy type) 5" x 1-3/4" x 5/32" = 127 mm x 45 mm x 4 mm.	2200.00	Doz.	2200.00	Doz.
0169	Brass butt hinges (heavy type) 6" x 1-1/2" x 2/16" = 152 mm x 38 mm x 3.2 mm.	2640.00	Doz.	2640.00	Doz.
0178	Brass butt hinges heavy oxidized 2" x 11/16" x 3/32" = 52 x 17 x 2.5 mm.	1200.00	Doz.	1200.00	Doz.
1077	Brass butt hinges heavy oxidized 3" x 13/16" x 3/32" = 80 x 21 x 2.5 mm.	1440.00	Doz.	1440.00	Doz.
0176	Brass butt hinges heavy oxidized 4" x 1-3/8" x 5/32" = 100 x 35 x 4 mm.	1800.00	Doz.	1800.00	Doz.
0174	Brass butt hinges heavy oxidized 5" x 1-1/2" x 3/16" = 127 mm x 38 mm x 5 mm.	1920.00	Doz.	1920.00	Doz.
0181	Brass butt hinges heavy type 1" = 26 mm size.	900.00	Doz.	900.00	Doz.
1998	Brass clamp for fixing rails 1-1/4" = 32 mm.	1500.00	Doz.	1500.00	Doz.
0189	Brass fanlight stay (c.p.).	2600.00	Doz.	2600.00	Doz.
0184	Brass fanlight stay.	2400.00	Doz.	2400.00	Doz.
0179	Brass halical spring hinges oxidized single action 6" = 152 mm.	2300.00	Each	2300.00	Each
0134	Brass handle oxidized 7" = 178 mm size....	3600.00	Doz.	3600.00	Doz.
0154	Brass handle with plate 1/8" = 3.2 mm thick 5" = 127 mm size..	2800.00	Doz.	2800.00	Doz.
0153	Brass handle with plate 1/8" = 3.2 mm thick 6" = 152 mm size.	3250.00	Doz.	3250.00	Doz.
0155	Brass handle with plate 1/8" =3.2 mm thick 4" = 102 mm size.	2500.00	Doz.	2500.00	Doz.
2443	Brass helical double action spring hinges (c.p.) 4" = 102 mm size.	1450.00	Each	1450.00	Each
2442	Brass helical double action spring hinges (c.p.) 5" = 127 mm size.	2150.00	Each	2150.00	Each
2441	Brass helical double action spring hinges (c.p.) 6" 152 mm size..	2500.00	Each	2500.00	Each

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0237	Brass helical spring hinges double action 6" = 152 mm size.	2600.00	Each	2600.00	Each
0236	Brass helical spring hinges single action 4" = 100 mm size.	1550.00	Each	1550.00	Each
0235	Brass helical spring hinges single action 5" = 127 mm size.	1700.00	Each	1700.00	Each
0238	Brass helical spring hinges: double action 5" = 127 mm.	2200.00	Each	2200.00	Each
0180	Brass helical springhinges: double action 4" = 102 mm.	1800.00	Each	1800.00	Each
1079	Brass helical springhinges: single action 6" = 152 mm.	2200.00	Each	2200.00	Each
2438	Brass helical, double action spring hinges oxidized 6" = 152 mm size..	1800.00	Each	1800.00	Each
2440	Brass helical, double action spring hinges, oxidized 4" = 102 mm size.	1500.00	Each	1500.00	Each
2439	Brass helical. double action spring hinges, oxidized 5" = 127 mm size.	1600.00	Each	1600.00	Each
0182	Brass hinges (anodized) 4" = 102 mm size..	2400.00	Doz.	2400.00	Doz.
0183	Brass hinges (c.p.) 4" = 102 mm size.	2400.00	Doz.	2400.00	Doz.
2019	Brass patti for nosing 2" x 1/8" = 51 mm x 3.2 mm ribbed.	680.00	Lbs	1497.80	kg
0589	Brass plated pipes: 1/2" = 13 mm.	290.00	Rft.	951.20	Ru.m
0591	Brass plated pipes: 1" = 25 mm..	875.00	Rft.	2870.00	Ru.m
0590	Brass plated pipes: 3/4" = 19 mm..	480.00	Rft.	1574.40	Ru.m
2004	Brass Qadrant stay size 6" = 152 mm.	550.00	Each	550.00	Each
2005	Brass Quadrant stay oxidized size 10" = 254 mm.	800.00	Each	800.00	Each
2007	Brass Quadrant stay oxidized size 6" = 152 mm.	600.00	Each	600.00	Each
2006	Brass Quadrant stay oxidized size 8" = 203 mm.	750.00	Each	750.00	Each
2002	Brass Quadrant stay size 10" = 254 mm.	700.00	Each	700.00	Each
2003	Brass Quadrant stay size 8" = 203 mm.	600.00	Each	600.00	Each
2001	Brass Roller 1-1/2" = 38 mm dia.	300.00	Each	300.00	Each
2000	Brass Roller Small dia 3/4" = 19 mm.	200.00	Each	200.00	Each
1997	Brass Roller, runners, double.	360.00	Doz.	360.00	Doz.
0215	Brass sash fastener 2-5/8" x 3/4" = 67 mm x 19 mm (c.p).	720.00	Doz.	720.00	Doz.
0213	Brass sash fastener 2-5/8" x 3/4" = 67 mm x 19 mm (oxidized).	600.00	Doz.	600.00	Doz.
0983	Brass sheet..	453.72	Lbs	999.38	kg
1992	Brass sockets dia 1" = 25 mm chromium plated.	520.00	Each	520.00	Each
1986	Brass sockets dia 1" = 25 mm..	445.00	Each	445.00	Each
1990	Brass sockets dia 1/2" = 13 mm.	325.00	Each	325.00	Each
1988	Brass sockets dia 3/4" = 19mm.	375.00	Each	375.00	Each
1994	Brass sockets dia 3/4" =19 mm chromium plated..	400.00	Each	400.00	Each
1996	Brass sockets, dia 1/2" = 13 mm chromium plated.	350.00	Each	350.00	Each
1983	Brass stainer 2" = 50 mm dia.	1350.00	Rft.	4428.00	Ru.m
1999	Brass stoppers.	225.00	Doz.	225.00	Doz.
1985	Brass tube: dia 1" = 25 mm.	430.00	Rft.	1410.40	Ru.m

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
1989	Brass tube: dia 1/2" = 13 mm.	250.00	Rft.	820.00	Ru.m
1995	Brass tube: dia 1/2" =13 mm chromium plated.	300.00	Rft.	984.00	Ru.m
1993	Brass tube: dia 3/4" = 19 mm chromium plated.	600.00	Rft.	1968.00	Ru.m
1987	Brass tube: dia 3/4" = 19 mm.	340.00	Rft.	1115.20	Ru.m
1991	Brass tubes: 1" = 25 mm dia (c.p.).	900.00	Rft.	2952.00	Ru.m
0216	Brass window catch (c,p) with 1/2" = 13 mm dia shoot.	2106.00	Doz.	2106.00	Doz.
0214	Brass window catch oxidized with 1/2" =13 mm dia shoot.	2040.00	Doz.	2040.00	Doz.
0212	Brassbutt hinges oxidized 1" = 26 mm..	960.00	Doz.	960.00	Doz.
0188	Brassfanlight stay (oxidized)..	2400.00	Doz.	2400.00	Doz.
22239	Brasso polish large size (200 Gm).	490.00	Bot	490.00	Bot
1924	Bricks ballast (vitrified) size 3/4" = 19 mm.	4500.00	% Cft	1590.11	Cu.m.
1924a	Bricks Cement Concrete fly ash 1800 to 2500 PSI (4-3/8" X 3" X 9")	13.50	Each	13.50	Each
1910	Bricks: Ballast (Jhama) size 1"= 25 mm.....	5500.00	% Cft	1943.46	Cu.m.
1909	Bricks: Ballast (Jhama) size 1-1/2" = 38 mm.	5300.00	% Cft	1872.79	Cu.m.
1908	Bricks: Ballast (Jhama) size 2" = 52 mm.	5100.00	% Cft	1802.12	Cu.m.
1907	Bricks: Ballast (Jhama) size 3" = 76 mm.	4800.00	% Cft	1696.11	Cu.m.
1912	Bricks: Glass translucent pressed, hollow 7-3/4" x 7-3/4" x 3-7/8" = 197 mm x 197 mm x 98 mm.	1000.00	Each	1000.00	Each
1913	Bricks: glass transparent pressed hollow 7-3/4" x 7-3/4" x 3-7/8" = (197 mm x 197 mm x 98 mm).	875.00	Each	875.00	Each
1915	Bricks: Jhama	10.00	Each	10.00	Each
1914	Bricks: Machine made 9" x 4-3/8" x 2-11/16" = (229 mm x 111 mm x 68 mm).	24000.00	Thou.	24000.00	Thou.
1911	Bricks: Special Burnt 9" x 4-3/8" x 2-11/16" = (229 mm x 111 mm x 68 mm).	18000.00	Thou.	18000.00	Thou.
0478	Brooms (coconut).	100.00	Each	100.00	Each
0081	Brushes (Double) with foreign hair 1 inches = 25 mm.	500.00	Each	500.00	Each
0080	Brushes (Double) with foreign hair 1-1/2" inches = 38 mm.	550.00	Each	550.00	Each
0079	Brushes (Double) with foreign hair 2 inches = 51 mm.	700.00	Each	700.00	Each
0077	Brushes (Double) with foreign hair 3 inches = 76 mm.	1000.00	Each	1000.00	Each
0076	Brushes (Double) with foreign hair 4 inches = 102 mm.	1250.00	Each	1250.00	Each
1062	Building stone (ordinary), Large size.	3800.00	% Cft	1342.76	Cu.m.
1063	Building stone (ordinary), Mixed size.	3300.00	% Cft	1166.08	Cu.m.
1064	Building stone (ordinary), Small size.	3300.00	% Cft	1166.08	Cu.m.
1065	Building stone, Lasbella or Jungshahi, Large size.	12000.00	% Cft	4240.28	Cu.m.
1066	Building stone, Lasbella or Jungshahi, mixed size.	11000.00	% Cft	3886.93	Cu.m.
1067	Building stone, Lasbella or Jungshahi, small size.	10000.00	% Cft	3533.57	Cu.m.
0875	Burma Teak Vaneer board : both sides : Density 600 Standard Quality, 1" (25 mm) thick.	16200.00	% Sft.	1743.75	Sq.m.
9876	Burma Teak Vaneer board : both sides : Density 600 Standard quality, 3/4" (19 mm) thick.	15700.00	% Sft.	1689.93	Sq.m.

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0889	Burma teak Veneer board : both sides : Density 600 Standard quality, 5/8" (16 mm) thick.	14700.00	% Sft.	1582.29	Sq.m.
0872	Burma Teak Veneer board : both sides: Density 600 Standard quality, 1/2" (13 mm) thick..	14400.00	% Sft.	1550.00	Sq.m.
0880	Burma teak veneer both sides : density 500 std quality 1/2" = 12 mm thick.	10600.00	% Sft.	1140.97	Sq.m.
0882	Burma teak veneer both sides : density 500 std quality 3/4" = 19 mm thick..	13200.00	% Sft.	1420.83	Sq.m.
0881	Burma teak veneer both sides : density 500 std quality 5/8" = 16 mm thick..	12900.00	% Sft.	1388.54	Sq.m.
2500	Burnt Brick Tiles 9" x 4-1/2" x 1-1/2".	1700.00	Hund.	1700.00	Hund.
2451	Burnt bricks first class 9" x 4-3/8" x 2-3/4" = 229 mm x 112 mm x 70 mm.	14000.00	Thou.	14000.00	Thou.
2453	Burnt Bricks Tiles 12" x 12" x 2"= 305 x 305 , x 51 mm..	60000.00	Thou.	60000.00	Thou.
2452	Burnt Bricks Tiles 12" x 6" x 2 " = 304 x 152 , x51 mm.	28000.00	Thou.	28000.00	Thou.
0567b	Burnt clay khaprail tiles of sizes	14500.00	%Sft	14500.00	%Sft
22240	C- type curtain railing (16' long) with fitting (heavy).	2000.00	Lenth.	2000.00	Lenth.
2519	C.C 1:2:4 cost in situe	14576.85	%Cft	5150.83	Cu.m.
0773	C.I. Bend 3" = 76 mm dia (plain, with out door).	900.00	Each	900.00	Each
0774	C.I. Bend 3" = 76 mm dia (plug, with door)	1050.00	Each	1050.00	Each
0775	C.I. Bend 4" = 102 mm dia (plain, with out door).	1320.00	Each	1320.00	Each
0776	C.I. bend 4" = 102 mm dia (plug, with door).	1570.00	Each	1570.00	Each
0777	C.I. head 3" = 76 mm dia.	550.00	Each	550.00	Each
0778	C.I. head 4" = 100 mm dia.	950.00	Each	950.00	Each
0789	C.I. obtuse bend ears, 3" = 76 mm dia.	260.00	Each	260.00	Each
0790	C.I. obtuse bend ears, 4" = 102 mm dia.	380.00	Each	380.00	Each
0785	C.I. offset bend 3" = 76 mm dia.	550.00	Each	550.00	Each
0786	C.I. offset bend 4" = 102 mm dia.	1150.00	Each	1150.00	Each
0781	C.I. plain Tee or plain Y 3" = 76 mm dia (without door).	970.00	Each	970.00	Each
0783	C.I. plain Tee or plain Y 4" = 102 mm dia (without door).	1410.00	Each	1410.00	Each
0784	C.I. Plug Tee or Plug Y 4" = 102 mm dia (with door).	1850.00	Each	1850.00	Each
0606	C.I. rain water pipes & fittings : 6' = 1.8 m (heavy) 4" = 102 mm dia.	462.00	Rft.	1515.36	Ru.m
0607	C.I. rain water pipes & fittings : 6' = 1.8 m (heavy) 6" = 152 mm dia.	880.00	Rft.	2886.40	Ru.m
0605	C.I. rain water pipes & fittings : 6' = 1.8 m (light) 4" = 102 mm dia.	360.00	Rft.	1180.80	Ru.m
0604	C.I. rain water pipes & fittings : 6' = 1.8 m long (heavy) 3" = 76 mm dia.	300.00	Rft.	984.00	Ru.m
0603	C.I. rain water pipes & fittings : 6' = 1.8 m long (light) 3" = 76 mm dia.	285.00	Rft.	934.80	Ru.m
0602	C.I. rain water pipes & fittings : 6' = 1.8 m long 2" = 52 mm dia.	260.00	Rft.	852.80	Ru.m

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0779	C.I. shoe 3" = 76 mm dia.	450.00	Each	450.00	Each
0780	C.I. shoe 4" = 100 mm dia.	580.00	Each	580.00	Each
2138	C.I. Shoe.	115.00	Lbs.	253.30	Kg.
0787	C.I. socket with ears, 3" = 76 mm dia.	550.00	Each	550.00	Each
0788	C.I. socket with ears,4" = 102 mm dia.	650.00	Each	650.00	Each
1984	C.I. spiral stair case consisting central post hand rail braces..	11200.00	Cwt.	11023.62	50 Kg.
0782	C.I. Plug Tee or Plug Y 3" = 76 mm dia (with door).	1175.00	Each	1175.00	Each
C-2173	C.P Handle	150.00	Each	150.00	Each
2299	Cable : dia 1-3/4" = 44 mm (4-1/2" mm cable).	440.00	Rft.	1443.20	Ru.m.
2300	Cable dia 1-1/4" = 44 mm (1/2" =13 mm cable).	225.00	Rft.	738.00	Ru.m.
2298	Cable dia 2" = 51 mm (71/2" = 13 mm).	575.00	Rft.	1886.00	Ru.m.
2297	Cable dia 3" = 76 mm (12-1/2" = 13 mm cable).	1290.00	Rft.	4231.20	Ru.m.
1942	Cable former.	3000.00	Each	3000.00	Each
1943	Cable Puller.	6700.00	Each	6700.00	Each
1945	Cable support wooden.	150.00	Each	150.00	Each
22241	Camouflaging Paint (Buxly)	2500.00	Im.gl.	549.92	Litre
1308	Carborundum stone of any grade 4" x 4" x 2" = 102 x 102 x 52 mm.	250.00	Each	250.00	Each
1309	Carborundum stone of any grade 6" x 2" x 2" = 152 mm x 52 mm x 52 mm.	500.00	Each	500.00	Each
22331	Cartage of sheet 0.3517 Cwt. Or 0.018 Ton.	764.58	Each	764.58	Each
2115	Cast iron : Grating 9" x 9"= 229 mm x 229 mm.	75.00	Lbs	165.20	kg
1969	Cast Iron pipe 6" dia at bottom & 12" dia at top = 150 mm dia at bottom and 305 dia at top.	9144.00	Cwt.	9000.00	50 Kg.
1961	Cast Iron.	5081.66	Cwt.	5001.63	50 Kg.
R1160	Cat Eye Double (Raised Profile) - Aliuminum	510.00	Each	510.00	Each
R1161	Cat Eye Double (Raised Profile) - Plastic	310.00	Each	310.00	Each
R1158	Cat Eye Single (Raised Profile) - Aluminium	445.00	Each	445.00	Each
R1159	Cat Eye Single (Raised Profile) - Plastic	240.00	Each	240.00	Each
22336	Catcher	60.00	Each	60.00	Each
0537	Caustic soda.	670.00	Lbs	1475.77	kg
22224	Cement	190.00	Lbs	418.50	kg
0090b	Cement Concrete 1:2:4 in foundation	268.97	Cft.	9500.02	Cu.m.
0090a	Cement Concrete 1:2:4. For fixing the end.	26700.00	%Cft	9434.63	Cu.m.
0090c	Cement Concrete 1:4:8 in foundation	155.57	Cft.	5494.73	Cu.m.
0103	Cement liquid compound for quick setting.	449.18	Lbs	989.38	kg
22353	Cement ordinary portland	750.00	Bags	0.00	Bags
0090	Cement portland grey cement.	15000.00	Ton.	14700.00	Tonne
1233	Cement tiles (flowered or patterned) for floor 6" x 6" x 3/4" = 152 mm x 152 mm x 19 mm in dark shade in grey cement.	700.00	Sq.Yd.	837.20	Sq.m.
1180	Cement tiles (flowered or patterned) for floor size 12" x 12" x 1" = 305 mm x 305 mm x 26 mm in dark shade in grey cement.	875.00	Sq.Yd.	1046.50	Sq.m.
1182	Cement tiles (flowered or patterned) for floors size 16" x 16" x 3/2" = 405 mm x 405 mm x 38 mm in dark shade in grey cement.	1300.00	Sq.Yd.	1554.80	Sq.m.

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
1181	Cement tiles (flowered or patterned) for floors size 16" x 16" x 5/4" = 405 mm x 405 mm x 32 mm in dark shade in grey cement.	1070.00	Sq.Yd.	1279.72	Sq.m.
1179	Cement tiles (flowered or patterned) for floors size 8" x 8" x 3/4" = 203 x 203 x 19 mm in dark shade in grey cement.	747.50	Sq.Yd.	894.01	Sq.m.
1161	Cement tiles (plain) for floors dark colour, size 12" x 12" x 3/4" = 305 mm x 305 mn x 19 mm in dark shade in grey cement.	767.00	Sq.Yd.	917.33	Sq.m.
1163	Cement tiles (plain) for floors dark colour, size 16" x 16" x 3/2" = 405 mm x 405 mr x 38 mm in dark shade in grey cement.	1150.50	Sq.Yd.	1376.00	Sq.m.
1162	Cement tiles (plain) for floors dark colour, size 16" x 16" x 5/4" = 406 mm x 406 mr x 32 mm in dark shade in grey cement.	949.00	Sq.Yd.	1135.00	Sq.m.
1159	Cement tiles (plain) for floors dark colour, size 6" x 6" x 3/4" = 152 mm x 152 mm x 19 mm in dark shade in grey cement.	526.50	Sq.Yd.	629.69	Sq.m.
1160	Cement tiles (plain) for floors dark colour, size 8" x 8" x 3/4" = 203 mm x 203 mm x 19 mm in dark shade in grey cement.	764.40	Sq.Yd.	914.22	Sq.m.
1156	Cement tiles (plain) for floors light color, size 12" x 12" x 1" = 305 mm x 305 mm x 26m in dark shade in grey cement.	975.00	Sq.Yd.	1166.10	Sq.m.
1158	Cement tiles (plain) for floors light colour, size 16" x 16" x 3/2" = 405 mm x 405 mm x 38 mm in dark shade in grey cement.	1430.00	Sq.Yd.	1710.28	Sq.m.
1157	Cement tiles (plain) for floors light colour, size 16" x 16" x 5/4" = 405 mm x 405 mm x 32 mm in dark shade in grey cement.	1202.50	Sq.Yd.	1438.19	Sq.m.
1154	Cement tiles (plain) for floors light colour, size 6" x 6" x 3/4" = 152 mm x 152 mm x 19 mm in dark shade in grey cement.	842.40	Sq.Yd.	1007.51	Sq.m.
1155	Cement tiles (plain) for floors light colour, size 8" x 8" x 3/4" = 203 mm x 203 mm x 19 mm.	845.00	Sq.Yd.	1010.62	Sq.m.
1152	Cement tiles (plain) for floors natural cement colour, size 12" x 12" x 1" = 305 mm x 305 mm x 26 mm.	737.10	Sq.Yd.	881.57	Sq.m.
1153	Cement tiles (plain) for floors natural cement colour, size 16" x 16" 1-1/4" = 406 mm x 406 mm x 32 mm.	923.00	Sq.Yd.	1103.91	Sq.m.
1150	Cement tiles (plain) for floors natural cement colour, size 6" x 6" x 3/4" = 152 mm x 152 mm x 19 mm.	468.00	Sq.Yd.	559.73	Sq.m.
1151	Cement tiles (plain) for floors natural cement colour, size 8" x 8" x 3/4" = 203 mm x 203 mm x 19 mm.	585.00	Sq.Yd.	699.66	Sq.m.

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
1170	Cement tiles (plain) for skirting & risers dark' colour size 12" x 6" x 3/4" = 305 mm x 152 mm x 19 mm.	585.00	Sq.Yd.	699.66	Sq.m.
1172	Cement tiles (plain) for skirting & risers dark colour size 6" x 6" x 3/4" = 152 mm x 152 mm x 19 mm.	526.50	Sq.Yd.	629.69	Sq.m.
1171	Cement tiles (plain) for skirting & risers dark colour size 8" x 6" x 3/4" = 203 mm x 152 mm x 19 mm.	585.00	Sq.Yd.	699.66	Sq.m.
1167	Cement tiles (plain) for skirting & risers light colour size 12" x 6" x 3/4" = 305 mm x 152 mm x 19 mm.	877.50	Sq.Yd.	1049.49	Sq.m.
1169	Cement tiles (plain) for skirting & risers light colour size 6" x 6" x 3/4" = 152 mm x 152 mm x 19 mm,	842.40	Sq.Yd.	1007.51	Sq.m.
1168	Cement tiles (plain) for skirting & risers light colour size 8" x 6" x 3/4" = 203 mm x 152 mm x 19 mm.	812.50	Sq.Yd.	971.75	Sq.m.
1166	Cement tiles (plain) for skirting & risers N cement colour size 6" x 6" x 3/4" = 152, mm x 152 mm x 19 mm.	468.00	Sq.Yd.	559.73	Sq.m.
1164	Cement tiles (plain) for skirting & risers N. cement colour size 12" x 6" x 3/4" = 305 mm x 152 mm x 19 mm.	520.00	Sq.Yd.	621.92	Sq.m.
1165	Cement tiles (plain) for skirting & risers N. cement colour size 8" x 6" x 3/4" = 203 mm x 152 mm x 19 mm.	520.00	Sq.Yd.	621.92	Sq.m.
1175	Cement tiles (plain) for treads chequered dark colour size 13" x 8" x 1" = 331 mm x 203 mm 25 mm.	676.00	Sq.Yd.	808.50	Sq.m.
1173	Cement tiles (plain) for treads chequered N. cement dr size 13" x 8" x 1" = 331 mm x 203 mm x 25 mm.	642.20	Sq.Yd.	768.07	Sq.m.
1178	Cement tiles (plain) for treads chqd & rbd dark colour size 13" x 8" x 1" = 331 mm x 203 mm x 26 mm.	676.00	Sq.Yd.	808.50	Sq.m.
1176	Cement tiles (plain) for treads chqd & red N. cement cri size 13" x 8" x 1" = 331 mm x 203 mm x 25 mm.	642.20	Sq.Yd.	768.07	Sq.m.
1174	Cement tiles (plain) for treads light colour: size 13" x 8" x 1" (330 mm x 330 mm x 25 mm).	642.20	Sq.Yd.	768.07	Sq.m.
1177	Cement tiles (plain) treads chqd & rbd light colour size 13"x 8"x 1" = 331 mm x 203 mm x 25 mm.	910.00	Sq.Yd.	1088.36	Sq.m.
1149	Cement tiles in white cement light shade 16" x 16" x l-1/4" = 405 mm x 405 mm x 6 mm.	949.00	Sq.Yd.	1135.00	Sq.m.
R1123	Cement type -1 (OPC)	738.00	P.Bag	738.00	P.Bag
0104	Cemto powder.	200.00	Lbs	440.53	kg
0543a	Chakwal Stone	130.00	P.Sft.	1399.32	Sqm
0543	Chalk powder.	2033.55	Cwt.	2001.53	50 Kg.
22343	Channel sides "U" i/c 5% wastage	135.00	Rft.	135.00	Rft.
2370	Chicken netting.	50.00	Sq.ft.	538.00	Sq.m.
22242	China latch set without handle No. 651	850.00	Each	850.00	Each

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
22243	Chip board 1/2" thick (Pakistani).	50.00	Sft.	538.00	Sq.m.
2378	Chip board thickness 1/2" = 13 mm.	50.00	Sq.ft.	538.00	Sq.m.
2378-a	Chromic synthetic red lead primer.	2850.00	Imgl	626.92	Litre
22244	Chromic Synthetic red oxide primer.	2250.00	Imgl	494.94	Litre
22245	Chromic zinc chromate.	1980.00	Imgl	435.55	Litre
0105	Cimcon.	930.00	Im.gl.	204.58	Litre
0013	Cinder.	2500.00	% Cft	883.39	Cu.m.
2097	Clamp for fixing rail aluminum.	260.00	Doz.	260.00	Doz.
1037	Closer pieces, 41-1/4" = 1.04 m long.	325.00	Each	325.00	Each
0119	Cloth for flags.	550.00	Yard	601.33	Mtr
0011	Coarse sand local.	3200.00	% Cft	1130.74	Cu.m.
0124	Coir (coconut).	5000.00	Mnd	6698.10	50 Kg.
2355	Coir strings.	70.00	Lbs	154.19	kg.
1146	Cold twisted ribbed steel minimm yeill of 60,000 psi.	9600.00	Cwt.	188.97	Kg.
22246	Colour tube.	150.00	Each	150.00	Each
0111f	coloured glazed tiles upto 144 Sq.inch size i/c wastage	110.00	Sft	1183.60	Sq.m.
22247	Commercial ply 1/2" thick (Karachi)	95.00	Sft.	1022.20	Sq.m.
2339	Common salt.	18.00	Lbs	39.65	kg
2294	Compacting with vibrator.	300.00	% Cft	106.01	Cu.m.
22248	Compound polish (ICI Duco).	700.00	qutr.	700.00	qutr.
0128	Compounds: caulking.	500.00	Imgl	109.99	Litre
1949	Cone fixture.	5200.00	Each	5200.00	Each
0982	Copper sheet.	499.00	Lbs	1099.12	kg
1041a	Copper wire for dowels 1 /4" = 6.4 mm dia.	499.00	Lbs	1099.12	kg
1940	Copper wire gauze 22 gauge 24 oz 1.2 mm thick 7 kg/sqm.	715.34	Sq.ft.	7697.06	Sq.m.
1948	Core helical, drawer, cost of for 12/0.200 dia cable.	1800.00	Each	1800.00	Each
0988	Cork sheet 3' x 2' x 1/4" - 915'mm x 610 mm x 6.4 mm (ordinary).	1000.00	Each	1000.00	Each
0987	Cork sheet 3' x 2' x 2" = 915 mm x610 mm x 52 mm (Rough).	2220.00	Each	2220.00	Each
0986	Cork sheet 3' x2' x 1" = 915 mmx 610 x 25 mm (Fine).	1500.00	Each	1500.00	Each
2373	Cork sheet thickness 1" = 25 mm.	250.00	Sq.ft.	2690.00	Sq.m.
2371	Cork sheet thickness 1/2" = 13 mm.	150.00	Sq.ft.	1614.00	Sq.m.
2374	Cork sheet thickness 1-1/2" = 38 mm.	325.00	Sq.ft.	3497.00	Sq.m.
2375	Cork sheet thickness 2" = 51 mm.	375.00	Sq.ft.	4035.00	Sq.m.
2372	Cork sheet thickness 3/4" = 19 mm.	195.00	Sq.ft.	2098.20	Sq.m.
0972	Corrugated F.C. sheet 10' x 42-3/4" x 1/4" -3.0 m x 1.1 m x 6.4 mm) thick.	3550.00	Each	3550.00	Each
0973	Corrugated F.C. sheet 4' x 41-1/4" x 5/32" = 1.2 m 1.05 = 4 mm thick (coloured).	1260.00	Each	1260.00	Each
0974	Corrugated F.C. sheet 6' x 41-1/4" x 5/32 = 1.8 m x 1.0 m = 4 mm thick.	2050.00	Each	2050.00	Each
0970	Corrugated F.C. sheet 6' x 42-3/4" x 1/4" (1.8 m x 1.1 m x 6.4 mm) thick.	2130.00	Each	2130.00	Each

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0971	Corrugated F.C. sheet 8' x 42-3/4" x 1/4" = (2.4 m x 1.1 m x 6.4 mm) thick.	2840.00	Each	2840.00	Each
2032	Cost of making bolts 1/2" = 13 mm dia 6" = 152 mm long with nuts.	2540.83	Cwt.	2500.82	50 Kg.
0122	Cotton waste.	75.00	Lbs	165.20	kg
R1148	Couring compound	63.75	P.ltr	63.75	P.ltr
0504	Creosote paint.	3256.00	Im.gl.	716.23	Litre
1921	Crush (any size) at Lahore.	8000.00	% Cft	2826.86	Cu.m.
1920	Crush (any size) at Peshawar..	5000.00	% Cft	1766.78	Cu.m.
1919	Crush (any size) at Rawalpindi.	5500.00	% Cft	1943.46	Cu.m.
R1111	Crushed Aggregate Base / Sub-Base-A	40.00	P.Cft	1412.80	Cu.m
C-1270	Cupboard frame 2-1/2" x 1-1/4" deodar wood and 3/4" thick lasani sheet shutter	7000.00	Cft	247240.00	Cu.m.
2119	Curtain rail (Brass).	450.00	Rft.	1476.00	Ru.m.
2117	Curtain rail : roller.	110.00	Doz.	110.00	Doz.
2116	Curtain rail: Aluminum.	170.00	Rft.	557.60	Ru.m.
2118	Curtain stopper: aluminum.	300.00	Doz.	300.00	Doz.
2198	Cutting M.S. bars and steel section.	300.00	Sq.ft.	3228.00	Sq.m.
22249	D- type aluminum curtain railing with fittings (heavy).	190.00	Rft.	623.20	Ru.m.
1008	Decorative sheets.	150.00	Sq.ft.	1614.00	Sq.m.
1039	Deformed bars, and hard'grade (G-60).	9900.00	Cwt.	9744.09	50 Kg.
1039a	Deodar wood beading (Ist class) 1/2" x 3/4".	30.00	Rft.	98.40	Ru.m.
22338	Deodar wood beading (Ist class) 3/4" x 1-1/2" .	40.00	Rft.	131.20	Ru.m.
22250	Deodar wood beading (Ist class) 3/4" x 3".	120.00	Rft.	393.60	Ru.m.
22251	Deodar wood beading (Ist class) 7/8" x 3" .	170.00	Rft.	557.60	Ru.m.
22252	Deodar wood beading upto (Ist class) 2" sq.	95.00	Rft.	311.60	Ru.m.
22253	Diamond China knob set No. 588. (CP)	1100.00	Each	1100.00	Each
0563j	Diamond Jumbolon insullation board 1" thick	66.00	Sft.	710.16	Sq.m.
0563ja	Diamond Jumbolon insullation board 1.5" thick	96.00	Sft.	1032.96	Sq.m.
0563jb	Diamond Jumbolon insullation board 2" thick	123.00	Sft.	1323.48	Sq.m.
22254	Diamond latch set No. 588. (CP)	1350.00	Each	1350.00	Each
R1130	Diesel	137.62	Ltr	137.62	Ltr
0530	Distemper (Vinyle Paintex ICI Emultion)	2400.00	Imgl	527.94	Litre
R1164	D-lock for glass / aluminium door	12500.00	Each	12,500.00	Each
2455	Door holder adjustable (bronze) 8-1/2" x 216 mm size.	650.00	Each	650.00	Each
2456	Door holder adjustable (bronze) spring action 2" x 1/4" size 51 mm x 6.4 mm.	375.00	Each	375.00	Each
2257	Door holder with rubber stop 1-1/2" (38 mm) dia bronze adjustable, 7" x 1- 5/8" = 178 mm x 42 mm size.	680.00	Each	680.00	Each
22255	Door lock set China with to keys No. 0223.	650.00	Each	650.00	Each
22256	Door rubber packing of approved sizes.	35.00	Rft.	114.80	Ru.m.
2192a	Door Shutter 1-1/2" (38mm) solid core both sides commercial ply 3mm thick with 1/4" thick 1st class deodar wood lipping.	1100.00	Sft	11836.00	Sq.m.

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
2192	Door shutter 1-1/2" = 38 mm, solid core, both sides commercial veneered.	1050.00	Sq.ft.	11298.00	Sq.m.
2190	Door shutter 1-1/2" = 38 mm, solid core, both sides teak veneered.	1600.00	Sq.ft.	17216.00	Sq.m.
2193	Door shutter 1-1/4" = 32 mm, solid core, both sides commercial veneered.	850.00	Sq.ft.	9146.00	Sq.m.
2191	Door shutter 1-1/4" = 32 mm, solid core, both sides teak veneered.	1400.00	Sq.ft.	15064.00	Sq.m.
0418	Door viewer: Brass/Chromium Plated..	450.00	Each	450.00	Each
0420	Drawers locks/cupboard locks, 4 lever, Brass 2-3/4" = 70 mm (china make).	300.00	Each	300.00	Each
1964	Drum empty .	2000.00	Each	2000.00	Each
2288a	Dry bond (Stile Bond) 20 Kg	410.00	P.bag	410.00	Bag
22257	Duco paint (incolour).	1245.00	qutr.	1245.00	qutr.
22258	Duco thinner (ICI).	2410.00	Imgl	530.14	Litre
0513	Dulux plastic emulsion paint (Pentolite)	4500.00	Im.gl.	989.88	Litre
0513a	Dulux weather shield (ICI).	4800.00	Im.gl.	1055.87	Litre
22356	Dumpa ceiling aluminium, China make 2' x 2' tiles/ strip ceiling including all accessories i.e, plump, rod etc	280.00	Sft	3,013.92	Sq.m.
22355	Dumpa ceiling aluminium, Denmark / Germany make 2' x 2' tiles/ strip ceiling including all accessories i.e, plump, rod etc	1050.00	Sft	11,302.20	Sq.m.
2307	Earth : imported (including royalty).	800.00	% Cft	282.69	Cu.m.
0125	Earth clay.	1500.00	% Cft	530.04	Cu.m.
1142	Earthen Pots (Qasoori type) : 10 inches (250 mm) dia.	150.00	Each	150.00	Each
1141	Earthen Pots (Qasoori type) : 12 inches (305 mm) dia.	200.00	Each	200.00	Each
1140	Earthen Pots (Qasoori type) : 14 inches (356 mm) dia.	350.00	Each	350.00	Each
1265	Earthen Pots (Qasoori type) : 4 inches (102 mm) dia.	50.00	Each	50.00	Each
1256	Earthen Pots (Qasoori type) : 6 inches (152 mm) dia.	70.00	Each	70.00	Each
1237	Earthen Pots (Qasoori type) : 8 inches (203 mm) dia.	100.00	Each	100.00	Each
1148	Earthen Pots (Qasoori type) : 9 inches (229 mm) dia.	110.00	Each	110.00	Each
R1137	Elastometric bearing pad M-183 (imported USA/EU made)	9.25	p.cucm	9.25	p.cucm
R1136	Elastometric bearing pad M-183, local made	2.25	p.cucm	2.25	p.cucm
22259	Elphi	100.00	Each	100.00	Each
0486	Enamel, supper glass synthetic (Robbialac)	4050.00	Im.gl.	890.89	Litre
R1157	Epoxy adhesive (2 Part) for Cateyes	1545.00	P.ltr	1,545.00	P.ltr
22260	Erraldite.	125.00	Each	125.00	Each
0499	Evershine all purpose synthetic enamel	3000.00	Im.gl.	659.92	Litre

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0132	Expanded metal 1/8" x 7/16" x 3/64" 22 gauge (3.2 mm x 11 mm x 5 mm) 1.2 mm thick.	13000.00	Cwt.	12795.28	50 Kg.
1300	Expanded metal 3/4 x 2-1/2" = (9 mm x 64 mm 18 gauge.	70.00	Sq.ft.	753.20	Sq.m.
1299	Expanded metal 3/4" x 2-1/2" = 19 mm x 64 mm 12 gauge.	90.00	Sq.ft.	968.40	Sq.m.
22322	Extra for using M.S plates form work and M.S pipe folding in place of partel wood form work on item No.23 to 29.	70.00	Sft	0.00	Sqm
22323	Extra for using M.S plates form work and M.S pipe folding in place of partel wood form work on item No.30 to 37,100 to 102, 110-112,123-126 & 129-131.	70.00	Sft	753.20	Sq.m
22324	Extra for using M.S plates form work and M.S pipe folding in place of partel wood form work on item No.38-54 &108-109.	70.00	Sft	753.20	Sq.m
22330	Extra hold fast	480.00	Each	480.00	Each
22261	Facing glazed tiles (National) 10 mm thick (65 mm x 265 mm) Pakistan make (First grade).	204.00	Sft	2195.04	Sq.m.
0144	Fancy handle knob (Brass) 4" = 102 mm.	2400.00	Doz.	2400.00	Doz.
0145	Fancy handle knob (Brass) 5" = 127 mm.	3000.00	Doz.	3000.00	Doz.
0146	Fancy handle knob (Brass) 6" = 152 mm.	3600.00	Doz.	3600.00	Doz.
2450a	Febrication, welding and fixing	100.00	Sft.	1076.00	Sq.m.
0452	Felt and mating: jutoid water proof matting 1/16" = 1.6 mm thick.	50.00	Sq.ft.	538.00	Sq.m.
0450	Felt and matting: felt underlay no-7.	75.00	Sq.ft.	807.00	Sq.m.
0451	Felt and matting: jutoid water proof matting 1/8" = 3.2 mm thick.	65.00	Sq.ft.	699.40	Sq.m.
0449	Felt and matting: ruberiod 3 ply.	120.00	Sq.ft.	1291.20	Sq.m.
2362	Felt/blanco (2 ply).	90.00	Sq.ft.	968.40	Sq.m.
22262	Fiber Febric .	30.00	Sft	322.80	Sq.m.
2450b	Fiber glass sheet 3 ply i/c 5% wastage	190.00	Sft.	2044.40	Sq.m.
R1177	Fiber shed consisting of 5 ply fiber sheet and 2" x 2" M.S Box pipe 16 gauge main frame beams.	750.00	Sft	8070.00	Sq.m.
22263	Fiber wood door fully pannalled 1-1/2" (38 mm).	1600.00	Sft	17216.00	Sqm
2337	Fibre : Manila.	90.00	Lbs	198.24	Kg
0506	Fibre glass paint.	9500.00	Im.gl.	2089.75	Litre
0421	Filing cabinet locks, chrom plated 2 way operation union No. 4501 ch.	950.00	Each	950.00	Each
R1114	Filler Material	30.00	P.Cft	30.00	P.Cft
0565	Fine marble dust.	400.00	Mnd.	535.85	50 Kg.
R1128	Fine Sand	32.00	Cft	32.00	Cft
2258	Finger plates Brass oxidized 6" x 2-1/4" = 152 mm x 32 mm.	650.00	Each	650.00	Each
0141	Finger plates: Aluminum 10" x 4" = 254 mm x 102 mm.	1000.00	Each	1000.00	Each

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0140	Finger plates: Aluminum 6" x 2-1/4" = 152 mm x 58 mm.	600.00	Each	600.00	Each
0143	Finger plates: Brass 10" x 4" = 254 mm x 100 mm.	1200.00	Each	1200.00	Each
0142	Finger plates: Brass 6" x 2-1/4" = 152 mm x 58 mm.	700.00	Each	700.00	Each
0068	Fire brick tiles 1st grade 9" x 4-3/8" x 1-3/4" = 229 mm x 109 mm x 45 mm.	7500.00	Hund.	7500.00	Hund.
0575	Fire bucket four imp. gallon.	450.00	Each	450.00	Each
2349	Fire Extinguisher of two gallon capacity.	12000.00	Each	12000.00	Each
R1167	Fixing charges of PVC /UPVC door shutter	60.00	Sft	60.00	Sft
22347	Fixing cutting of aluminium / glass door/ partition complete etc	75.00	Sft	75.00	Sft
2178a	Flash handle for draws	150.00	Each	150.00	Each
2139	Flat iron 1-1/2" x 1/4" / Hold fast 6" long (1-1/4" x 3/16")	9652.00	Cwt.	12930.02	50 Kg.
1241	Flexible PVC tiles (30 cm x 30 cm x 2mm).	140.00	Sq.ft.	1506.40	Sq.m.
1243	Flexible PVC tiles 20 cm x 20 cm x 1.6 mm	100.00	Sq.ft.	1076.00	Sq.m.
1242	Flexible PVC tiles 30 cm x 30 cm x 1.6 mm.	100.00	Sq.ft.	1076.00	Sq.m.
1240	Flexible PVC tiles 30 cm x 30 cm x 2.5 mm..	150.00	Sq.ft.	1614.00	Sq.m.
2389	Foam concrete of any thickness.	470.00	Cft.	16600.40	Cu.m.
0049	Foam rubber adhesive.	120.00	Lbs	264.32	Kg
2245	Foam rubber sheet 1/16" = 1.5 mm thick.	25.00	Sq.ft.	269.00	Sq.m.
2244	Foam: rubber sheet 1" = 25 mm thick.	160.00	Sq.ft.	1721.60	Sq.m.
2247	Foam: rubber sheet 1/2" = 13 mm thick.	125.00	Sq.ft.	1345.00	Sq.m.
2246	Foam: rubber sheet 3/4" = 19 mm thick.	140.00	Sq.ft.	1506.40	Sq.m.
0998	Formica board 3/16" = 5 mm thick.	100.00	Sq.ft.	1076.00	Sq.m.
22342	Frame Top & Bottom D-48 i/c 5% wastage	295.00	Rft.	295.00	Rft
0559	French polish.	3250.00	Imgl	714.91	Litre
1967	Freyssinet anchorage in set (1-male, 1-female) cone complete.	6000.00	Set	6000.00	Set
22264	Fuel mobile oil.	2854.88	Im.gl.	628.00	Litre
2360	Fuel/ petrol (SGP 87 Octane).	660.53	Im.gl.	145.30	Litre
2361	Fuel/100 octane.	730.24	Im.gl.	160.63	Litre
2358	Fuel/high speed diesel.	625.62	Im.gl.	137.62	Litre
2359	Fuel/light speed diesel.	486.70	Im.gl.	107.06	Litre
0443	Fuel: charcoal.	3545.78	Mnd.	4750.00	50 Kg.
0446	Fuel: coal dust.	3615.20	Mnd.	4843.00	50 Kg.
0444	Fuel: coal.	518.40	Mnd.	694.46	50 Kg.
0445	Fuel: coke.	48406.00	Tonne	47437.88	Tonne
0442	Fuel: fire wood.	1200.00	Mnd.	1607.54	50 Kg.
0447	Fuel: gun fuse 25' = 7.6 m coil with cartridge.	190.00	Each	190.00	Each
0448	Fuel: gun powder with dynamite.	290.00	Lbs	638.77	Kg
R1115	Furnace oil	68.36	P.ltr	68.36	P.ltr
2320	G. Iron Cross, Size 2" x 2" = 51 mm x 51 mm.	550.00	Each	550.00	Each
22317	G.I pipe 4" dia = 100 mm.	840.90	Rft.	2758.15	Ru.m.
2320a	G.I Razor wire 18 gauge i/c 2 Nos wire 8 gauge.	14224.00	Cwt.	14000.00	50 Kg.
2320b	G.I Wire 1/4" dia	14224.00	Cwt.	14000.00	50 Kg.

BASIC RATES OF MATERIALS - 2022

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0250	G.I. cone-headed roofing nails 2-1/2" to 1-1/4" = 64 mm to 32 mm.	360.00	Grs.	360.00	Grs.
0276	G.I. cone-headed screws 1-1/4" to 2-1/2" = 32 mm to 64 mm.	340.00	Grs.	340.00	Grs.
2125	G.I. cross dia 1" = 25 mm.	450.00	Each	450.00	Each
2124	G.I. cross dia 1-1/2" = 38 mm.	900.00	Each	900.00	Each
2123	G.I. cross dia 2" = 52 mm.	1960.00	Each	1960.00	Each
2321	G.I. cross, size 1" x 1" = 25 mm x 25 mm.	300.00	Each	300.00	Each
2368	G.I. hooks, bolts & nutts 3/4" x 1/4" (19 mm x 6.4 mm).	860.00	Grs.	860.00	Grs.
2367	G.I. hooks, bolts & nutts 4-1/2" x 5/16" (115 mm x 8 mm).	2000.00	Grs.	2000.00	Grs.
2121	G.I. pipe dia I-1/2" = 38 mm (10 S.W.G) (2.5 mm thick).	251.14	Rft.	823.74	Ru.m.
2035	G.I. Pipes casing 4" = 102 mm dia.	840.90	Rft.	2758.15	Ru.m.
2122	G.I. Pipes dia 1" = 25 mm (12 S.W.G) (2.17 mm thick).	168.25	Rft.	551.86	Ru.m.
2120	G.I. Pipes dia 2" = 51 mm (10 S.W.G) (2.54 mm thick).	351.11	Rft.	1151.64	Ru.m.
2129	G.I. Pipes dia 3" = 76 mm (9 S.W.G) (2.8 mm thick).	581.53	Rft.	1907.42	Ru.m.
2128	G.I. tee dia 1" = 25 mm.	160.00	Each	160.00	Each
2127	G.I. tee dia 1-1/2" = 38 mm.	480.00	Each	480.00	Each
2126	G.I. tee dia 2" = 52 mm.	680.00	Each	680.00	Each
0118	G.I. tee hinges 10" size = 254 mm.	1800.00	Doz.	1800.00	Doz.
0117	G.I. tee hinges 12" size = 305 mm.	2400.00	Doz.	2400.00	Doz.
0116	G.I. tee hinges 18" size = 457 mm.	3000.00	Doz.	3000.00	Doz.
1290	G.I. Wire 18 to 20 B.W.G. (1.41 to 1.27 mm) thick.	140.00	lbs.	308.37	Kg
2322	G.Iron tee, size 2" x 2" » 51 x51 mm.	680.00	Each	680.00	Each
0978	Galvanised Iron corrugated .sheet 24 B.W.G (1.06 mm thick).	16600.00	Cwt.	16338.58	50 Kg.
0977	Galvanised Iron corrugated sheet 18 to 22 B.W.G (1.4 mm to 1.22 mm) thick.	16600.00	Cwt.	16338.58	50 Kg.
0979	Galvanised Iron corrugated sheet 26 B.W.G (0.97 mm thick).	16600.00	Cwt.	16338.58	50 Kg.
1014	Galvanised Iron plain sheet 16 gauge (1.6 mm thick).	16500.00	Cwt.	324.79	Kg
0980	Galvanised Iron plain sheet 18 to 22 B.W.G (1.41 mm to 1.2 mm thick).	16500.00	Cwt.	16240.16	50 Kg.
1013	Galvanised Iron plain sheet 24 gauge (1.06 mm thick).	16500.00	Cwt.	324.79	Kg
2384	Galvanised Iron wire gauze 22 gauge 12 mesh (1.2 mm thick 2.1 mm mesh).	140.00	Sq.ft.	1506.40	Sq.m.
2385	Galvanized Iron wire gauze 24 gauge 12 mesh (1.06 mm thick 2.1 mm mesh).	120.00	Sq.ft.	1291.20	Sq.m.
22265	Gate Hinges 1" dia 6" long (Steel Rod).	350.00	Each	350.00	Each
22266	GI corrugated sheet (22 Gauge).	200.00	Sft.	2152.00	Sq.m.
2435	GI bolts and nuts 2" x 1/4" size (51 mm x 6.4 mm).	1250.00	Grs.	1250.00	Grs.

BASIC RATES OF MATERIALS - 2022

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
2066	GI pipes with shoe at one end and hinged at other end dia 3" (76 mm).	520.00	Rft.	1705.60	Ru.m.
0474	Glass (plain) and mirrors: 1/4" = 6.4 mm thick (bevelled edge).	300.00	Sq.ft.	3228.00	Sq.m.
22267	Glass : Polished plate (Imported).	350.00	Sq.ft.	3766.00	Sq.m.
22268	Glass broken pieces.	508.16	Cwt.	500.16	50 kg.
R1165	Glass Door Handles set of 2 Nos	2100.00	Set	2,100.00	Set
0129	Glass Fibre for Expansion to Jamb.	40.00	Rft	131.20	Ru.m.
0456	Glass figured 3/16" (4.8 mm).	150.00	Sq.ft.	1614.00	Sq.m.
0455	Glass figured 32 oz (4 mm) (9.76 Kg.).	120.00	Sq.ft.	1291.20	Sq.m.
0454	Glass figured 44 oz (5 mm) (13.42 Kg.).	180.00	Sq.ft.	1936.80	Sq.m.
2200	Glass frosted 24 oz (7.3 Kg.) 3 mm.	90.00	Sq.ft.	968.40	Sq.m.
22269	Glass frosted 5 mm.	160.00	Sq.ft.	1721.60	Sq.m.
0475	Glass mirror 1/4" = 6.4 mm thick (rounded corners).	280.00	Sq.ft.	3012.80	Sq.m.
0457	Glass mirror 24 oz (3 mm) (7.3 Kg.).	120.00	Sq.ft.	1291.20	Sq.m.
0459	Glass mirror 32 oz (4 mm) (9.76 Kg.).	180.00	Sq.ft.	1936.80	Sq.m.
0461	Glass plain 2 mm (1.7 mm / 2.4 mm) above 9 sqft (0.8352 sqm).	60.00	Sq.ft.	645.60	Sq.m.
0460	Glass plain 2 mm (1.7 mm / 2.4 mm) upto 9 sqft (0.8352 sqm).	55.00	Sq.ft.	591.80	Sq.m.
0462	Glass plain 3 mm (2.5 mm / 3.4 mm) upto 16 sqft (1.4848 sqm).	85.00	Sq.ft.	914.60	Sq.m.
0463	Glass plain 3 mm (2.5 mm / 3.4 mm) upto 24 sqft (2.2272 sqm).	90.00	Sq.ft.	968.40	Sq.m.
0464	Glass plain 4 mm (3.5 mm / 4.4 mm) upto 16 sqft (1.4848 sqm).	100.00	Sq.ft.	1076.00	Sq.m.
0465	Glass plain 4 mm (3.5 mm / 4.4 mm) upto 24 sqft (2.2272 sqm).	110.00	Sq.ft.	1183.60	Sq.m.
0468	Glass plain 5 mm (4.5 mm / 5.4 mm) upto 48 sqft (4.4544 sqm).	120.00	Sq.ft.	1291.20	Sq.m.
0466	Glass plain 5 mm (4.5 mm/ 5.4 mm) upto 16 sqft (1.4848 sqm).	140.00	Sq.ft.	1506.40	Sq.m.
0467	Glass plain 5 mm(4.5 mm / 5.4 mm) upto 24 sqft (2.2272 sqm).	130.00	Sq.ft.	1398.80	Sq.m.
0470	Glass plain 6 mm (5.5 mm / 6.4 mm) upto 24 sqft (2.2272 sqm).	220.00	Sq.ft.	2367.20	Sq.m.
0471	Glass plain 6 mm (5.5 mm / 6.4 mm) upto 48 sqft (4.4544 sqm).	250.00	Sq.ft.	2690.00	Sq.m.
0469	Glass plain 6 mm(5.5 mm / 6.4 mm) upto 16 sqft (1.4848 sqm).	190.00	Sq.ft.	2044.40	Sq.m.
0458	Glass plate (10 mm).	350.00	Sq.ft.	3766.00	Sq.m.
2201	Glass: coloured 24 oz (7.3 Kg.) 3 mm.	150.00	Sq.ft.	1614.00	Sq.m.
2203	Glass: panes, wired 1/4" = 6.4 mm thick.	340.00	Sq.ft.	3658.40	Sq.m.
2202	Glass: panes, wired 24 oz (7.3 Kg.).	300.00	Sq.ft.	3228.00	Sq.m.
2208	Glass: patties 3 mm, 1: =25 mm thick.	10.00	Rft.	32.80	Ru.m.
2204	Glass: plates, frosted 1/4" = 6.4 mm thick.	310.00	Sq.ft.	3335.60	Sq.m.

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0472	Glass: polished plate glass upto 48 sft (4.4544 Sq.m).	300.00	Sq.ft.	3228.00	Sq.m.
2205	Glass: sheet, impregnated mica glass.	350.00	Sq.ft.	3766.00	Sq.m.
2207	Glass; patties 5 mm, 1" = 25 mm thick.	15.00	Rft.	49.20	Ru.m.
2208a	Glazed Tiles 1/4 "(6mm) approx thick 12" x 12" (304mm x 304 mm) colour master make Pakistani (1st grade).	134.71	Sft	1449.48	Sq.m.
0111a	Glazed Tiles 1/4" (6mm) approx. thick 8" x 10" (203mm x 254mm) colour Pak. make 1st grade.	130.06	Sft	1399.45	Sq.m.
0111b	Glazed Tiles 1/4" (6mm) approx. thick 8" x 10"(203mm x 254mm) white solo master make Pakistan (1st grade.)	125.41	Sft	1349.41	Sq.m.
0111c	Glazed Tiles 1/4"(6mm) approx thick 12" x 12" (304mm x 304 mm) colour of Pakistan make (1st grade).	134.71	Sft	1449.48	Sq.m.
0111d	Glazed Tiles 1/4"(6mm) approx thick 12" x 12" (304mm x 304 mm) white of Pakistan make (1st grade).	120.77	Sft	1299.49	Sq.m.
0111e	Glazed Tiles 1/4"(6mm) approx thick 12" x 12" (304mm x 304mm) white master make Pakistani (1st grade).	125.41	Sft	1349.41	Sq.m.
R1171	Glazed tiles colour 12" x 24", 1/4" (6 mm) thick Master or equivalent.	210.00	Sft	210.00	Sft
R1171a	Glazed tiles white 12" x 24", 1/4" (6 mm) thick Master or equivalent.	215.00	Sft	215.00	Sft
1217	Glazed tiles white / coloured glazed tiles upto 1.5" square feet i/c wastage.	130.00	P.Sft.	1399.32	P.Sqm
1224	Glazed tiles, coloured (make) 4" x 4" x 1/4" =102 mm x 102 mm x 6.4 mm.	360.00	Doz.	360.00	Doz.
1223	Glazed tiles, coloured (make) 6" x 6" x 1/4" = 152 x 152 x 6 mm (Foreign make).	500.00	Doz.	500.00	Doz.
1220a	Glazed tiles, coloured 4" x 4" =102 mm x 102 mm, 1/4" = 6.4 mm thick.	3200.00	M^2	3200.00	M2
1218a	Glazed tiles, coloured 6" x 6" = 152 mm x 152 mm, 1/4" = 6.4 mm thick.	1700.00	M^2	1700.00	M2
1226	Glazed tiles, coloured cove pieces / bends 6" = 152 mm.	3000.00	M^2	3000.00	M2
1220	Glazed tiles, white 4" x 4" =102 mm x 102 mm, 1/4" = 6.4 mm thick.	3000.00	M^2	3000.00	M2
1218	Glazed tiles, white 6" x 6" = 152 mm x 152 mm, 1/4" = 6.4 mm thick.	1500.00	M^2	1500.00	M2
1227	Glazed tiles, white cove piece / bend 4" = 102 mm.	4500.00	M^2	4500.00	M2
1229	Glazed tiles, white cove pieces / bend 3" = 76 mm.	650.00	Doz.	650.00	Doz.
1225	Glazed tiles, white cove pieces / bends 6" = 152 mm.	1200.00	Doz.	1200.00	Doz.
1220a	Glazed tiles, white/colour 4" x 4" =102 mm x 102 mm, 1/4" = 6.4 mm thick.	3100.00	M^2	3100.00	M2
2324	Glue paste.	140.00	Lbs	308.37	Kg

BASIC RATES OF MATERIALS - 2022

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
1235a	Graffiato wall coating 2.5 mm to 3mm	25.00	Sft	269.00	Sq.m.
N1075	Granit stone Slab Pakistani origin stone origin 3/4" = 19 mm thick size 12" x 12" = 305 x 305 mm.	375.00	Sq.ft	4035.00	Sq.m
N1074	Granit stone tiles Pakistani origin 3/4" = 19 mm thick size 6" x 12" = 152 x 305 mm.	325.00	Sq.ft	3497.00	Sq.m
N1074a	Granit stone tiles Pakistani origin 3/4" = 19 mm thick size 6" x 6" = 152 x 152 mm.	250.00	Sq.ft	2690.00	Sq.m
N1079	Granite stone slab of Pakistani origin 3/4" = 19 mm thick size 48" x 48" = 1.22 x 1.22 m.	1100.00	Sq.ft	11836.00	Sq.m
N1081	Granite stone slab of Pakistani origin 1" = 25 mm thick size 12" x 12" = 305 x 305 mm.	475.00	Sq.ft	5111.00	Sq.m
N1081a	Granite stone slab of Pakistani origin 1" = 25 mm thick size 12" x 18" = 305 x 457 mm.	525.00	Sq.ft	5649.00	Sq.m
N1081b	Granite stone slab of Pakistani origin 1" = 25 mm thick size 24" x 30" = 610 x 762 mm.	600.00	Sq.ft	6456.00	Sq.m
N1081c	Granite stone slab of Pakistani origin 1" = 25 mm thick size 30" x 36" = 762 x 915 mm.	800.00	Sq.ft	8608.00	Sq.m
N1081d	Granite stone slab of Pakistani origin 1" = 25 mm thick size 48" x 48" = 1.22 m x 1.22m.	1500.00	Sq.ft	16140.00	Sq.m
N1080	Granite stone slab of Pakistani origin 1" = 25 mm thick size 6" x 12" = 152 x 305 mm.	425.00	Sq.ft	4573.00	Sq.m
N1080a	Granite stone slab of Pakistani origin 1" = 25 mm thick size 6" x 6" = 152 x 152 mm.	325.00	Sq.ft	3497.00	Sq.m
N1082	Granite stone slab of Pakistani origin 3/4" = 19 mm thick size 12" x 18" = 305 x 457 mm.	525.00	Sq.ft	5649.00	Sq.m
N1083	Granite stone slab of Pakistani origin 3/4" = 19 mm thick size 24" x 30" = 610 x 762 mm.	600.00	Sq.ft	6456.00	Sq.m
N1078	Granite stone slab of Pakistani origin 3/4" = 19 mm thick size 30" x 36" = 762 x 915 mm.	650.00	Sq.ft	6994.00	Sq.m
N1084	Granite stone slab of Pakistani origin 3/4" = 19 mm thick size 30" x 36" = 762 x 915 mm.	800.00	Sq.ft	8608.00	Sq.m
N1085	Granite stone slab of Pakistani origin 3/4" = 19 mm thick size 48" x 48" = 1.22 x 1.22 m.	1500.00	Sq.ft	16140.00	Sq.m
N1077	Granite stone slab Pakistani origin 3/4" = 19 mm thick size 24" x 30" = 610 x 762 mm.	450.00	Sq.ft	4842.00	Sq.m
N1076	Granite stone slab Pakistani origin of 3/4" = 19 mm thick size 12" x 18" = 305 x 457 mm.	400.00	Sq.ft	4304.00	Sq.m
R1101	Granular Sub-base-A	32.00	P.Cft	32.00	P.Cft
0131	Granulated cork sheet 1/8 inch thick.	75.00	Sft	807.00	Sq.m.
1962	Grass Dacca.	20.00	Sq.ft.	215.20	Sq.m.
1963	Grass local:	15.00	Sq.ft.	161.40	Sq.m.
0019	Gravel 1" = 25 mm & down gauge (Hub river).	4000.00	% Cft	1413.43	Cu.m.
2296	Gravel: sharp of required size.	3200.00	% Cft	1130.74	Cu.m
2390	Grey cement portland.	750.00	Cwt.	738.19	50 Kg.
2352	Grill railing, Brass.	120420.00	Cwt.	2370.37	Kg
2340	Gum.	99.82	Lbs	219.87	Kg
2311	Gun metal bushing.	22500.00	Cwt.	22145.67	50 Kg.

BASIC RATES OF MATERIALS - 2022

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
2348	Gunny bags. (1.2 cft = 0.034 cum) Jute.	125.00	Each	125.00	Each
2348a	Gypsem board tiles for false ceiling size 2' x 2' x 12mm	95.00	Sft	1022.20	Sqm
2026a	Gypsum board 12mm thick tiles.	215.00	Sq.ft.	2313.40	Sq.m
1336	Hair of goat or ox.	135.00	Lbs	297.36	Kg
R1126	Hand Broken Stone 2-1/2" - 1/2"	32.60	P.Cft	1151.43	Cu.m
0055	Hand broken stone ballast 1" to 3/8" size 26 mm to 9 mm.	4600.00	% Cft	1625.44	Cu.m.
0054	Hand broken stone ballast 1-1/2" to 1/2" size 38 mm to 13 mm.	2400.00	% Cft	848.06	Cu.m
0053	Hand broken stone ballast 2" to 1/2" size 51 mm to 13 mm.	2200.00	% Cft	777.39	Cu.m
0052	Hand broken stone ballast 2-1/2" to 3/4" size 64 mm to 19 mm.	2050.00	% Cft	724.38	Cu.m
0051	Hand broken stone ballast 3" to 3/4" size 76 mm to 19 mm.	2000.00	% Cft	706.71	Cu.m
1959	Hand pump : local:	16000.00	Each	16000.00	Each
2173	Handles: Aluminum heavy type size 4" = 102 mm.	1200.00	Doz.	1200.00	Doz.
2172	Handles: Aluminum heavy type size 5" = 127 mm.	1800.00	Doz.	1800.00	Doz.
2171	Handles: Aluminum heavy type size 7" = 178 mm.	2400.00	Doz.	2400.00	Doz.
2170	Handles: Brass, Chromium plated size 4" = 102 mm.	3600.00	Doz.	3600.00	Doz.
2169	Handles: Brass, Chromium plated size 5" = 127 mm.	4200.00	Doz.	4200.00	Doz.
2168	Handles: Brass, Chromium plated size 7" = 178 mm.	5000.00	Doz.	5000.00	Doz.
2176	Handles: Brass, circular or curved size 5" = 127 mm.	4200.00	Doz.	4200.00	Doz.
2177	Handles: Brass, circular or curved, Chromium plated, size 5" = 127 mm.	4000.00	Doz.	4000.00	Doz.
2175	Handles: Brass, circular or curved, size 4" = 102 mm.	3600.00	Doz.	3600.00	Doz.
2167	Handles: Brass, heavy type size 7" = 178 mm.	4800.00	Doz.	4800.00	Doz.
2178	Handles: fancy heavy type, Brass door knob with plate.	900.00	Each	900.00	Each
2174	Handles: Iron, Chromium plated, size 6" 152 mm.	3240.00	Doz.	3240.00	Doz.
0075	Hand-moulded burnt brick tiles 9" x 4-3/8" x 1-3/4" = 230 mm x 111 mm x 69 mm 2nd class.	15000.00	Thou.	15000.00	Thou.
0070	Hand-moulded burnt bricks 9 inches x 4-3/8 inches x 2-11/16 inches (229 mm x 111 mm x 68 mm) 2nd class solid.	10500.00	Thou.	10500.00	Thou.
0071	Hand-moulded burnt Bricks 9 inches x 4-3/8 inches x 2-11/16 inches (229 mm x 111 mm x 68 mm) Hollow Bricks 1st class	25000.00	Thou.	25000.00	Thou.
0072	Hand-moulded burnt Bricks 9 inches x 4-3/8 inches x 2-11/16 inches (229 mm x 111 mm x 68 mm) Perforated Bricks 1st class.	26000.00	Thou.	26000.00	Thou.

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Sub-Head Code-130

Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0069	Hand-moulded burnt bricks 9" x 4-3/8" x 2-11/16" = 230 x 69 mm first cl. solid.	12000.00	Thou.	12000.00	Thou.
0074	Hand-moulded burnt tiles 9" x 4-3/8" x 1-3/4" = 230 x 111 x 69 mm 1st class.	17000.00	Thou.	17000.00	Thou.
0212a	Hanging Rod with Brackets	70.00	Rft.	229.60	Ru.m
0993	Hard board 1/8" = 3.2 mm thick.	31.25	Sq.ft.	336.25	Sq.m.m
0994	Hard board 3/16" = 4.8 mm thick.	38.00	Sq.ft.	408.88	Sq.m.
2329	Hard board masonite 1/4" = 6.4 mm thickness.	40.00	Sq.ft.	430.40	Sq.m.
2330	Hard board masonite 3/16" = 5 mm thickness.	39.00	Sq.ft.	419.64	Sq.m.
2328	Hard board masonite 5/16" = 8 mm thickness.	50.00	Sq.ft.	538.00	Sq.m.
2093	Hasps & staples (Brass) 4" = 102 mm size.	1000.00	Doz.	1000.00	Doz.
2092	Hasps & staples (Brass) 5" = 127 mm size.	1200.00	Doz.	1200.00	Doz.
2094	Hasps & staples (Iron oxidised) 4" = 102 mm size.	660.00	Doz.	660.00	Doz.
0168	Hasps & staples (Iron) oxidised Copper finished 2-1/2" to 3-1/2" = 64 mm to 89 mm size.	1200.00	Doz.	1200.00	Doz.
0167	Hasps & staples (Iron) oxidised Copper finished 4" = 102 mm size.	1500.00	Doz.	1500.00	Doz.
0166	Hasps & staples (Iron) oxidised Copper finished 5" = 127 mm size.	1800.00	Doz.	1800.00	Doz.
0165	Hasps & staples (safety) heavy (Iron) 2-1/2" to 3" = 64 mm to 76 mm size.	360.00	Doz.	360.00	Doz.
0164	Hasps & staples (safety) heavy (Iron) 4" = 100 mm size.	540.00	Doz.	540.00	Doz.
0163	Hasps & staples (safety) heavy (Iron) 5" = 127 mm size.	720.00	Doz.	720.00	Doz.
2155	Hasps & staples: Brass heavy type 2" = 52 mm size.	800.00	Doz.	800.00	Doz.
2159	Hasps & staples: Brass oxidised 2" = 52 mm size.	850.00	Doz.	850.00	Doz.
2158	Hasps & staples: Brass oxidised 3" = 76 mm size.	1050.00	Doz.	1050.00	Doz.
2157	Hasps & staples: Brass oxidised 4" =102 mm size.	1200.00	Doz.	1200.00	Doz.
2156	Hasps & staples: Brass oxidised 5" = 127 mm size.	1300.00	Doz.	1300.00	Doz.
2154	Hasps & staples: Brass size 3" = 76 mm ...	900.00	Doz.	900.00	Doz.
2162	Hasps & staples: Iron oxidised 2" = 52 mm size.	480.00	Doz.	480.00	Doz.
2161	Hasps & staples: Iron oxidised 3" = 76 mm size.	550.00	Doz.	550.00	Doz.
2160	Hasps & staples: Iron oxidised 5" = 127 mm size.	840.00	Doz.	840.00	Doz.
2165	Hasps & staples: Iron painted 3" = 76 mm size.	415.00	Doz.	415.00	Doz.
2164	Hasps & staples: Iron painted 4" = 102 mm size.	600.00	Doz.	600.00	Doz.
2163	Hasps & staples: Iron painted 5" = 127 mm size.	800.00	Doz.	800.00	Doz.
2166	Hasps & staplestIron painted 2" = 52 mm size.	375.00	Doz.	375.00	Doz.
0161	Hasps and staples (safety type) heavy (Brass) 4" = 102 mm size.	1000.00	Doz.	1000.00	Doz.
0160	Hasps and staples (safety type) heavy (Brass) 5" = 127 mm size.	1300.00	Doz.	1300.00	Doz.
0162	Hasps and staples (safety) heavy 2.5" to 3.5" = 64 mm to 89 mm size.	972.00	Doz.	972.00	Doz.
0149	Heavy (Brass) handle 4" = 102 mm.	2400.00	Doz.	2400.00	Doz.
0148	Heavy (Brass) handle 5" = 127 mm.	2900.00	Doz.	2900.00	Doz.

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0147	Heavy (Brass) handle 6" = 152 mm.	3024.00	Doz.	3024.00	Doz.
2291	Helical core.	220.00	Rft.	721.60	Ru.m.
2292	Helical core: labour charges to install.	30.00	Rft.	98.40	Ru.m.
2334	Hemp: fine chopped jute.	60.00	Lbs	132.16	Kg.
0120	Hessian cloth width 36 inches (914 mm).	81.00	Sq.Yd.	96.88	Sq.m.
2335	Hessian.	110.00	Lbs	242.29	Kg.
0099	High Alumina cement.	5488.00	Cwt.	5401.57	50 Kg.
1042	High tensile steel (bars) for prestressed, concrete.	10230.00	Cwt.	10068.90	50 Kg.
1041	High tensile steel (strands) for prestressed, concrete.	11340.00	Cwt.	11161.42	50 Kg.
1040	High tensile steel (wires) for prestressed, concrete.	13260.00	Cwt.	13051.18	50 Kg.
2431	Hinge aluminum 3" size (Imported).	400.00	Each	400.00	Each
R1186	Hinges	150.00	Each	150.00	Each
1925	Hinges parliament 3" x 3" x 1" x 1-1/8" (76 x 76 mm x 25 mm x 35 mm).	3000.00	Doz.	3000.00	Doz.
1925	Hinges parliament 4" x 4" x 1" x 5/32" = 102 mm x 102 mm x 25 mm x 4 mm.	4200.00	Doz.	4200.00	Doz.
2153	Hinges: Brass, oxidised size 5" = 127 mm .	5184.00	Doz.	5184.00	Doz.
2140	Hinges: male & female.	370.00	Each	370.00	Each
2148	Hinges: parliament, Brass oxidised 5" x 1/4" = 127 mm x 6.4 mm.	5184.00	Doz.	5184.00	Doz.
2147	Hinges: parliament, Iron 5" x 5" = 127 mm x 127 mm 12 gauge (2.17 mm thick).	3780.00	Doz.	3780.00	Doz.
2146	Hinges: parliament, Iron 6" x 6" = 152 mm x 152 mm 12 gauge (2.17 mm thick).	4536.00	Doz.	4536.00	Doz.
2144	Hinges: piano, Aluminum.	80.00	Rft.	262.40	Ru.m.
2143	Hinges: piano, Brass Chromium plated.	160.00	Rft.	524.80	Ru.m.
2142	Hinges: piano, Brass oxidised.	140.00	Rft.	459.20	Ru.m.
2141	Hinges: piano, Brass.	120.00	Rft.	393.60	Ru.m.
2145	Hinges: piano, Iron.	30.00	Rft.	98.40	Ru.m.
2150	Hinges: tee Iron size 10" = 254 mm.	800.00	Doz.	800.00	Doz.
2151	Hinges: tee Iron size 12" = 305 mm.	920.00	Doz.	920.00	Doz.
2149	Hinges: tee Iron size 18" = 457 mm.	1300.00	Doz.	1300.00	Doz.
2152	Hinges: tee Iron'size 7" - 178 mm.	650.00	Doz.	650.00	Doz.
2308	Hire charges of bamboos.	5.00	Rft.	16.40	Ru.m.
2179	Holders: fancy heavy type Brass, pendulum type.	225.00	Each	225.00	Each
0476	Holdfast (flat Iron) fabricated.	72.59	Lbs	159.89	Kg.
2450	Holdfast (Iron).	72.59	Each	72.59	Each
2189	Hole making in sheet by punching.	10.00	Each	10.00	Each
2187	Holes making by machine upto 1" = 25 mm dia 1/4" = 6.4 mm thick plate.	15.00	Each	15.00	Each
2185	Holes making by machine upto 1" = 25 mm dia in 1/2" = 13 mm thick plate.	40.00	Each	40.00	Each
2188	Holes making by machine upto 1" = 25 mm dia in 1/8" = 3.2 mm thick plate.	10.00	Each	10.00	Each
2186	Holes making by machine upto 1" = 25 mm dia in 3/8" = 9 mm thick plate.	50.00	Each	50.00	Each

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
2434	Hollow CC block 1:3:6 size (18" x 10" x 12)" (457 mm x 254 mm x 305 mm).	9500.00	Hund.	9500.00	Hund.
2433	Hollow CC block 1:3:6 size (18" x 9" x 12)" (457 mm x 229 mm x 305 mm).	9000.00	Hund.	9000.00	Hund.
2432	Hollow CC block 1:3:6 size (9" x 8" x 12') (229 mm x 152 mm x 305 mm).	5500.00	Hund.	5500.00	Hund.
0242	Hook and eye Brass section (heavy) 4" = 102 mm.	120.00	Each	120.00	Each
0241	Hook and eye Brass section (heavy) 6" = 152 mm.	150.00	Each	150.00	Each
0245	Hook and eye Iron (galvanised) heavy 4" = 102 mm.	50	Each	50.00	Each
0244	Hook and eye Iron (galvanised) heavy 6" = 152 mm.	75	Each	75.00	Each
0243	Hook and eye Iron (galvanised) heavy 9" = 229 mm.	100	Each	100.00	Each
0246	Hook and eye Iron (oxidised) 9" = 229 mm.	110	Each	110.00	Each
0248	Hook and eye Iron (oxidised) heavy 4" = 102 mm.	50	Each	50.00	Each
0247	Hook and eye Iron (oxidised) heavy 6" = 152 mm.	80	Each	80.00	Each
2181	Hooks and eye: Brass section (oxidised) 4" = 102 mm.	140	Each	140.00	Each
2180	Hooks and eye: Brass section (oxidised) 6" 152 mm.	180	Each	180.00	Each
2183	Hooks and eye: Iron, oxidized size 4" = 102 mm.	50	Each	50.00	Each
2182	Hooks and eye: Iron, oxidized size 6" = 152 mm.	80	Each	80.00	Each
2184	Hooks made of Iron, approved design.	240.00	Doz.	240.00	Doz.
0477	Hoop Iron (patti).	70.00	Lbs	154.19	Kg.
0133	Hoop Iron 18 S.W.G. 1" x 1/16" (52 mm x 1.6 mm).	8130.00	Cwt.	8001.97	50 Kg.
0001	Hydrochloric acid.	100.00	Lbs	220.26	Kg.
0551	Indigo (neel).	385.66	Lbs	849.47	Kg.
R1180	Installation of post frame & fiber	50.00	Sft	538.00	Sq.m.
2376	Iron bolts with nut dia 1/2" = 13 mm length 3-1/2' = 1.07 m.	50.00	Each	50.00	Each
0220	Iron butt hinges (oxidised) 1" = 26 mm, 18 gauge (1.41 mm).	180.00	Doz.	180.00	Doz.
0223	Iron butt hinges (oxidised) 2-1/2" = 64 mm, 18 gauge (1.41 mm).	360.00	Doz.	360.00	Doz.
0225	Iron butt hinges (oxidised) 4" = 102 mm, 18 gauge (1.41 mm).	750.00	Doz.	750.00	Doz.
0226	Iron butt hinges (oxidised) 5" = 127 mm, 18 gauge (1.41 mm).	900.00	Doz.	900.00	Doz.
0208	Iron butt hinges 4" = 102 mm 14 gauge = 1.8 mm.	600.00	Doz.	600.00	Doz.
0211	Iron butt hinges c.p. 4" = 102 mm.	800.00	Doz.	800.00	Doz.
0223	Iron Butt Hinges: (C.P.) 1" = 25 mm.	200.00	Doz.	200.00	Doz.
0221	Iron Butt Hinges: (oxidised): 1-1/2" = 38 mm 18 gauge (1.41 mm).	240.00	Doz.	240.00	Doz.
0222	Iron Butt Hinges: (oxidised): 2" = 51 mm 18 gauge (1.41 mm).	300.00	Doz.	300.00	Doz.

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0224	Iron Butt Hinges: (oxidised): 3" = 76 mm 18 gauge (1.41 mm).	390.00	Doz.	390.00	Doz.
0203	Iron butt hinges: 1" = 26 mm 18 gauge = 1.41 mm.	160.00	Doz.	160.00	Doz.
0204	Iron butt hinges: 1-1/2" = 38 mm 18 gauge = 1.41 mm.	190.00	Doz.	190.00	Doz.
0205	Iron butt hinges: 2" = 52 mm 18 gauge = 1.41 mm.	240.00	Doz.	240.00	Doz.
0206	Iron butt hinges: 2-1/2" = 64 mm 18 gauge = 1.41 mm.	300.00	Doz.	300.00	Doz.
0207	Iron butt hinges: 3" = 7.6 mm, 16 gauge = 1.6 mm.	360.00	Doz.	360.00	Doz.
0209	Iron butt hinges: 5" = 127 mm 14 gauge = 1.8 mm.	600.00	Doz.	600.00	Doz.
2197	Iron chain 3/4" = 19 mm dia link.	100.00	Rft.	328.00	Ru.m.
2350	Iron chain with hook.	175.00	Each	175.00	Each
1955	Iron grating 9" = 238 mm dia:	225.00	Each	225.00	Each
0157	Iron handle (heavy type) 4" = 102 mm size.	600.00	Doz.	600.00	Doz.
0156	Iron handle (heavy type) 5" = 127 mm size.	660.00	Doz.	660.00	Doz.
0159	Iron handle (oxidised copper finished) 4" = 102 mm size.	780.00	Doz.	780.00	Doz.
0158	Iron handle (oxidised copper finished) 5" = 127 mm size.	900.00	Doz.	900.00	Doz.
0210	Iron handles 6" = 152 mm.	840.00	Doz.	840.00	Doz.
0138	Iron handles c.p. 4" = 102 mm size.	840.00	Doz.	840.00	Doz.
0137	Iron handles c.p. 5" = 127 mm size.	960.00	Doz.	960.00	Doz.
0136	Iron handles oxidised 4" = 102 mm size.	720.00	Doz.	720.00	Doz.
0135	Iron handles oxidised 5" = 127 mm size.	840.00	Doz.	840.00	Doz.
2446	Iron helical double action spring hinges oxidised 4" = 102 mm size.	450.00	Each	450.00	Each
2445	Iron helical double action spring hinges oxidised 5" = 127 mm size.	600.00	Each	600.00	Each
2444	Iron helical double action spring hinges oxidised 6" = 152 mm size.	750.00	Each	750.00	Each
0240	Iron helical spring hinges double action 6" = 152 mm size.	750.00	Each	750.00	Each
0239	Iron helical spring hinges single action 5" = 127 mm size.	500.00	Each	500.00	Each
0192	Iron Helical Spring Hinges: Double action 4" = 102 mm.	450.00	Each	450.00	Each
0191	Iron Helical Spring Hinges: Single action 4" = 102 mm.	400.00	Each	400.00	Each
0190	Iron Helical Spring Hinges: Single action 6" = 152 mm.	600.00	Each	600.00	Each
22333	Iron Hinges	24.00	Rft	78.72	Ru.m.
2449	Iron hold fasts 1/8" x 2" = 3.2 mm x 52 mm flat iron 3" = 76 mm long.	60.00	Each	60.00	Each
2038	Iron nosing 2" = 52 mm wide, 1/4" = 6.5 mm thick (ribbed).	11435.00	Cwt.	11254.92	50 Kg.
0286	Iron oxidised copper finished sliding bolts heavy 12" = 305 mm long x 3/4" = 19 mm.	450.00	Each	450.00	Each
0288	Iron oxidised copper finished sliding bolts heavy 6" = 152 mm long x 1/2" = 12 mm.	300.00	Each	300.00	Each

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0287	Iron oxidised copper finished sliding bolts heavy 9" = 230 mm long x 5/8" = 16 mm.	425.00	Each	425.00	Each
2459	Iron parliamentary hinges 3" (76 mm) 15 gauge (1.8 mm thick).	1750.00	Doz.	1750.00	Doz.
2458	Iron parliamentary hinges 4" (102 mm) 12 gauge 2.17 mm thick).	2250.00	Doz.	2250.00	Doz.
2457	Iron parliamentary hinges 5" x 5" x 1-1/4" x 3/16" = 127mm x 127 mm x 32 mn 5 mm thick.	2700.00	Doz.	2700.00	Doz.
2382	Iron roller dia 1-1/2" = 38 mm.	100.00	Each	100.00	Each
2383	Iron roller: dia 3/4" 19 mm.	75.00	Each	75.00	Each
0231	Iron sash fastener 2-5/8" x 3/4" = 67 mm x 19 mm (c.p.).	260.00	Doz.	260.00	Doz.
0217	Iron sash fastener 2-5/8" x 3/4" = 67 mm x 19 mm (oxidised).	260.00	Doz.	260.00	Doz.
22334	Iron Screws 1" size	120.00	Lbs	120.00	P.kg
1957	Iron shoe for 1-1/2" = 38 mm dia bamboo:	150.00	Each	150.00	Each
0229	Iron 'T' Hinges (heavy): 5" = 127 mm 18 gauge (1.41 mm.	750.00	Doz.	750.00	Doz.
0227	Iron T Hinges (heavy): 3" = 76 mm 18 gauge (1.41 mm).	450.00	Doz.	450.00	Doz.
0228	Iron T Hinges (heavy): 4" = 102 mm 18 gauge (1.41 mm).	600.00	Doz.	600.00	Doz.
0230	Iron T Hinges (heavy): 6" = 152 mm 18 gauge (1,41 mm).	850.00	Doz.	850.00	Doz.
0234	Iron T Hinges (oxidised): 4" = 102 mm.	650.00	Doz.	650.00	Doz.
0232	Iron window catch with 1/2" = 13 mm dia shoot (c.p.).	750.00	Doz.	750.00	Doz.
2325	Iron work.	9600.00	Cwt.	9448.82	50 Kg.
0218	Iron wtndow catch wfth 1/2" = 13 mm dia shoot (oxidised).	750.00	Doz.	750.00	Doz.
0563	Ironrte powder.	150.00	Lbs	330.40	Kg.
0330a	Joint Filler. (20 kg. Each)	450.00	P.kg	450.00	P.kg
22345	Jointer	325.00	No	325.00	No
0563a	Jumbolon Insulation (15 mm to 20 mm hose pipes).	65.60	R.m.	20.00	Rft
0563b	Jumbolon Insulation (25 mm to 32 mm hose pipes).	85.00	Ru.m.	25.91	Rft
0563c	Jumbolon Insulation (40 mm hose pipes).	160.00	Ru.m.	48.78	Rft
0130	Jute fibre,	260.00	Lbs	572.69	Kg.
1275	Kail wood.	2200.00	Cft	77704.00	Cu.m
0567	Kerosene oil.	430.00	Imgl	94.59	Litre
0567a	Khaprail tiles C.C. 1:2:4 (11" x 6")	9000.00	%Sft	9000.00	%Sft
0422	Knobset (Japan) ordinory.	5000.00	Set	5000.00	Set
22270	Kochi with handle.	100.00	Each	100.00	Each
0524	Kromic pink wood primer.	3000.00	Imgl	659.92	Litre
0521	Kromic synthetic red lead primer.	3200.00	Imgl	703.92	Litre
0523	Kromic synthetic red oxide primer,	2500.00	Imgl	549.93	Litre
0522	Kromic white lead primer.	2800.00	Imgl	615.93	Litre

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0520	Kromic yellow primer.	2800.00	Imgl	615.93	Litre
0525	Kromic zink chromate.	3000.00	Imgl	659.92	Litre
0481	Kunj.	100.00	Lbs	220.26	Kg.
22271	Lacquer (Duco)	975.00	qutr.	975.00	qutr.
0559a	Lacquer (ICI) polish	4650.00	Imgl	1022.88	Litre
0556	Lakh dana (shellac).	1814.88	Lbs	3997.53	Kg.
0556a	Laminated board.	100.00	Sft.	1076.00	Sq.m.
0556b	Laminated wood (HDF) floor 12mm thick	430.00	Sft.	4626.80	Sq.m.
0556b	Lasani Board 1/2" thick	100.00	P.Sft.	1076.40	Sqm
0556c	Lasani Board 3/4" thick	125.00	P.Sft.	1345.50	Sqm
R1185	Lasani Press	950.00	Sft.	10222.00	Sq.m.
0556d	Lasani wood 1/2" thick.	100.00	Sft.	1076.00	Sq.m.
0556e	Lasani wood 1/4" thick.	60.00	Sft.	645.60	Sq.m.
0556f	Lasani wood 3/4" thick.	140.00	Sft.	1506.40	Sq.m.
0556g	Latch for aluminum door.	650.00	Each	650.00	Each
0509	Latex flat evershining paint.	4150.00	Imgl	912.89	Litre
0479	Lead wool.	250.00	Lbs	550.66	Kg.
0550	Lemon chrome.	350.00	Lbs	770.93	Kg.
0480	Lime unpacked.	800.00	Mnd	1071.70	50 Kg.
22272	Liminaled Sheet 3/4" thick.	75.00	P.Sft.	807.30	Sqm
22337	Liminated board	75.00	Sft	807.00	Sq.m.
22272a	Liminated Press sheet 4mm thick.	45.00	P.Sft.	484.38	Sqm
R1183	Limination board 3/4" thick high glass	5500.00	Sft.	59180.00	Sq.m.
0536	Linseed oil genuine double boiled (special).	2300.00	Imgl	505.94	Litre
0557	Loban (gum berzam).	200.00	Lbs	440.53	Kg.
0441	Local door locks' babar locks.	900.00	Each	900.00	Each
0440	Local door locks: Omega locks.	850.00	Each	850.00	Each
2485	Lock: Alpha knobset bath latches, No. 8000 (Japan make).	2800.00	Each	2800.00	Each
2495	Lock: Alpha knobset lock No. 6600 (Japan make).	3500.00	Each	3500.00	Each
2484	Lock: Alpha knobset lock. No- 7000 (Japan make).	2200.00	Each	2200.00	Each
2470	Lock: bath lalch corona No, 25011 (Japan make).	2600.00	Each	2600.00	Each
2469	Lock: bath talch corona lock (No. 21031) with handle [Japan make).	1800.00	Each	1800.00	Each
2461	Lock: darado main door lock with handle (USA make).	23000.00	Each	23000.00	Each
2493	Lock: door alpha "W" high living lock (Japan make).	5500.00	Each	5500.00	Each
2494	Lock: door alpha lock (Taiwan make).	1500.00	Each	1500.00	Each
2492	Lock: door alpha lock wrth handle (Taiwan make).	1800.00	Each	1800.00	Each
2491	Lock: door basti lock with handle (Japan make).	4600.00	Each	4600.00	Each
2498	Lock: door lock handle type (Hungary make).	2500.00	Each	2500.00	Each
2490	Lock: door lucky lock No. 6000 (Japan make).	2200.00	Each	2200.00	Each
2475	Lock: Hydraulic branno door closer No. 2 (Yugoslavia make).	5500.00	Each	5500.00	Each
2476	Lock: Hydraulic brannoo door closer No. 3 (Yugoslavia make) .	5600.00	Each	5600.00	Each

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
2477	Lock: Hydraulic door closer ravobi No. 62 (Japan make).	3500.00	Each	3500.00	Each
2479	Lock: Hydraulic door closer, No. 5002 (Japan make).	6600.00	Each	6600.00	Each
2480	Lock: Hydraulic door closer, No. 707 (Japan make).	6000.00	Each	6000.00	Each
2478	Lock: Hydraulic door closer, rayobi No, 72 (Japan make).	6500.00	Each	6500.00	Each
2497	Lock: Iyio line bath knobset (U,S.A, make)	3500.00	Each	3500.00	Each
2496	Lock: Iyio line knobset (U-S.A, make)	5500.00	Each	5500.00	Each
2487	Lock: Kwikset knobset bath latches (U.S.A make).	8100.00	Each	8100.00	Each
2486	Lock: Kwikset knobset lock (U.S.A. make).	8000.00	Each	8000.00	Each
2483	Lock: lucky knobset (Taiwan make).	2500.00	Each	2500.00	Each
2468	Lock: main door corona lock (No, 21082) with handle (Japan make).	7200.00	Each	7200.00	Each
2464	Lock: main door corona lock (No, 21102) with handle (Japan make).	6500.00	Each	6500.00	Each
2467	Lock: main door corona lock (No. 21051) with handle (Japan make).	7000.00	Each	7000.00	Each
2463	Lock: main door corona lock (No. 24001) (Japan make)	7500.00	Each	7500.00	Each
2465	Lock: main door corona lock (No. 24002) with handle (Japan make).	8000.00	Each	8000.00	Each
2466	Lock: main door corona lock (No. 24032) with handle (Japan make).	8200.00	Each	8200.00	Each
2489	Lock: main door harloc pacemaker (USA make).	22000.00	Each	22000.00	Each
2462	Lock: main door kwiksel lock with handle (U,S.A. make).	25000.00	Each	25000.00	Each
2481	Lock: marathon knobaet (U.S.A. make).	18500.00	Each	18500.00	Each
2474	Lock: night latches No, 558 (China make).	1450.00	Each	1450.00	Each
2460	Lock: Yale main door lock handle type (Italy make).	12000.00	Each	12000.00	Each
2471	Lock: Yale night latches, No. 3612 (Japan make).	8500.00	Each	8500.00	Each
2473	Lock: Yale night latches, No. 610 (Italian make).	8700.00	Each	8700.00	Each
2472	Lock: Yale night latches. No. 620 (Japan make).	8600.00	Each	8600.00	Each
2482	Lock; Alpha W lock knobsel, plain latches (Japan make).	6500.00	Each	6500.00	Each
2194	M, S. door frame 18 gauge (1.41 mm) of approved size 4.0" = 102 mm profile i/c acessories.	210.00	Rft.	688.80	R.m.
1954	M. S, fastner of approved quality: cost of.	135.00	Each	135.00	Each
1043	M. S. angle of sizes.	9652.00	Cwt.	9500.00	50 Kg.
1038	M. S. Bars and angle iron of sizes	9296.92	Cwt.	9150.51	50 Kg.
2067	M. S. bolts of sizes.	10500.00	Cwt.	10334.65	50 Kg.
2195	M. S. door frame 18 gauge (1.41 mm) of approved size 5.75" 146 mm profile i/c accessories.	240.00	Rft.	787.20	R.m.
2377	M. S. plate thickness 1/8" = 3 mm size 6" x 6" = 152 mm x 152 mm size.	120.00	Each	120.00	Each
2065	M. S. plates Thick 1/4" cut to size.	960.00	Sq.ft	10329.60	Sq.m

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
2381	M. S. sheet Thickness 1/8" = 3 mm.	100.00	Lbs	220.26	Kg.
2381b	M. S. sheet Thickness 3/16" = 4.76 mm.	100.00	Lbs	220.26	Kg.
22273	M.S Pipe 1/2" x 1/2"(13mm x l3mm) 18 gauge.	27.00	Rft	88.56	Ru.m.
22274	M.S Pipe 1-1/2" x 1-1/2" (38mmx 38 mm) 18 gauge.	75.00	Rft	246.00	Ru.m.
2381a	M.S Pipe 1-1/2" x 1-1/2" (38mmx38mm) 16 gauge	110.00	Rft	360.80	Ru.m.
22274a	M.S Pipe 1-1/2" x 1-1/4" (38mmx 38 mm) 18 gauge.	100.00	Rft	328.00	Ru.m.
22275	M.S Pipe 2" x 1" (52mmx25mm) 18 gauge	110.00	Rft	360.80	Ru.m.
22276	M.S Pipe 2" x 2"(52mm x 52mm) 16 gauge.	150.00	Rft	492.00	Ru.m.
22277	M.S Pipes box type windows/Vent: (16 gauge)	875.00	Sft	9415.00	Sq.m.
22278	M.S Pipes box type windows/Vent: (18 gauge)	675.00	Sft	7263.00	Sq.m.
0976	M.S plate 3/8" to 1/2" = 9 mm to 13 mm thick.	193040.00	Ton	189179.20	Tonne
1044	M.S. flats of sizes.	9398.00	Cwt.	9250.00	50 Kg.
2318	M.S. grill of 3/4" x 1/8" = 19 x 3 mm flat iron fixed to masonry or concrete work.	11430.00	Cwt.	11250.00	50 Kg.
2317	M.S. grill of 3/4" x 1/8" = 19x3 mm flat iron fixed on a wooden frame.	11430.00	Cwt.	11250.00	50 Kg.
22332a	M.S. pipe 4" dia	400.00	Rft	1312.00	Ru.m.
22332	M.S. pipe1/2"x1/2" Beading	27.00	Rft	88.56	Ru.m.
0063a	M.S "D" type rail 3" dia	175.00	Rft	574.00	Ru.m.
1984a	M.S. spiral stair case consisting central post hand rail braces..	11000.00	Cwt.	10826.77	50 Kg.
1984b	M.S pipe1-1/2" x 1-1/2", 16 SWG	150	Rft	492.00	Ru.m.
1984c	M.S square pipe3/4" x 3/4", 16 SWG	70	Rft	229.60	Ru.m.
1984d	M.S pipe2-1/2" x 2-1/2", 16 SWG	220	Rft	721.60	Ru.m.
0576s	M.S.T. (Angle - flat iron and iron bars of sizes.	10617.00	Cwt.	10449.80	50kg.
1045	M.S.T. (section, channel and joists of sizes).	10617.00	Cwt.	10449.80	50 Kg.
0064	Machine bricks fire 1st grade 9" x 4-3/6" x 2-11 /16" = 229 x 111 x 68 mm.	24000.00	Thou.	24000.00	Thou.
0065	Machine bricks glass transparent pressed hollow 7-3/4" x 7-3/4" x 3-7/8" = 197 x 197 x 98 mm.	1050.00	Each	1050.00	Each
0060	Machine bricks hollow 9" x 4-3/8" x 2-11 /16" = 229 x 111 x 68 mm.	36000.00	Thou.	36000.00	Thou.
0061	Machine bricks perforated 9" x 4-3/8" x 2-11/16" = 229 x 111 x 68 mm.	36000.00	Thou.	36000.00	Thou.
0062	Machine bricks solid 1st class, 9" x 4-3/8" x 2-11/16" = 229 x 111 x 68 mm.	24000.00	Thou.	24000.00	Thou.
0063	Machine bricks solid 2nd class, 9" x 4-3/8" x 2-11/16" = 229 x111 x 68 mm.	15000.00	Thou.	15000.00	Thou.
0067	Machine burnt clay tiles 2nd class cl. 9" x 4-3/8" X 1-3/4" = 229 x 119 x 44 mm.	20000.00	Thou.	20000.00	Thou.
0066	Machine burnt clay tiles Isl class 9" x 4-3/8" x 1-3/4" = 229 x 111 x 44 mm.	22000.00	Thou.	22000.00	Thou.
0056	Machine crushed boluders 3/8" to 3/16" size 9 mm to 5 mm size.	4800.00	% Cft.	1696.11	Cu.m.
0087	Machine crushed boulders 1" to 3/8" size = 25 mm to 9 mm.	5000.00	% Cft.	1766.78	Cu.m.

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0057	Machine crushed boulders 1/4" to 3/16" size 6 mm to 5 mm.	4700.00	% Cft.	1660.78	Cu.m.
0085	Machine crushed boulders 2" to 1/2" size 57 mm to 13 mm.	2550.00	% Cft.	901.06	Cu.m.
0083	Machine crushed boulders 3" to 3/4" size , 80 mm to 19 mm.	2300.00	% Cft.	812.72	Cu.m.
0029	Machine crushed boulders graded size 1/2" to 3/16" = 13 mm to 5 mm.	4900.00	% Cft.	1731.45	Cu.m.
0028	Machine crushed boulders graded size 3/4" to 3/16" = 19 mm to 5 mm,	5000.00	% Cft.	1766.78	Cu.m.
0027	Machine crushed boulders graded sizes 1" to 1/16" = 25 mm to 1.6 mm.	4800.00	% Cft.	1696.11	Cu.m.
0026	Machine crushed boulders graded sizes 1" to 3/16" = 25 mm to 5 mm.	4800.00	% Cft.	1696.11	Cu.m.
0086	Machine crushed boulders graded sizes 1-1/2" to 1/2" size 38 mm to 13 mm.	2650.00	% Cft.	936.40	Cu.m.
0025	Machine crushed boulders graded sizes 1-1/2" to 3/16" = 38 mm to 47 mm.	4700.00	% Cft.	1660.78	Cu.m.
0084	Machine crushed boulders, 2-1/2" to 3/4" size 64 mm to 19 mm.	2450.00	% Cft.	865.72	Cu.m.
0010	Machine crushed stone dust.	2000.00	% Cft.	706.71	Cu.m.
R1179	Making foundation concrete	10.00	Sft	107.60	Sq.m.
22320	Malmal cloth Soaked in bitumen with over laps.	25.00	Mtr	82.00	R.m.
22279	Mansion polish 5 Lbs. Tin.	4500.00	tin	4500.00	Tin
0560	Mansion polish.	660.00	Lbs	1453.74	Kg.
0109	Manual c.c. blocks moulding charges	600.00	Hund.	600.00	Hund.
0484	Manure (leaves).	6000.00	% Cft.	2120.14	Cu.m.
2354	Manure : sewage including cartage.	10000.00	% Cft.	3533.57	Cu.m.
0483	Manure animal.	5000.00	% Cft.	1766.78	Cu.m.
1097	Marble atone slab of Peshawar & Quetta origin 1-1/2" = 38 mm thick size 24" x 30" = 610 x 762 mm.	1170.00	Sq.ft	12589.20	Sq.m
1199	Marble chips tiles grey cement 12" x 12" x 1" = 305 x 305 x 26 mm (1/2" x 1/2" = 12, 12 mm topping & base).	780.00	Sq.Yd.	932.88	Sq.m
1192	Marble chips tiles grey cement 12" x 12" x 1-1/4" = 305 x 305 x 33 mm (3/4" x 1/2" = 19, 13 mm topping & base).	936.00	Sq.Yd.	1119.46	Sq.m
1210	Marble chips tiles grey cement 12" x 12" x 3/4" = 305 x 305 X 19 mm (3/8" x 3/B- = 9, 9 mm topping & base).	682.50	Sq.Yd.	816.27	Sq.m
1232	Marble chips tiles grey cement 12" x 6" x 3/4" - 305 x 152 x 19 mm.	910.00	Sq.Yd.	1088.36	Sq.m
1204	Marble chips tiles grey cement 6" x 6" x 3/4" = 152 x 152 x 19 mm (3/8" x 3/8" = 9x9 mm topping & base).	825.50	Sq.Yd.	987.30	Sq.m

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
1207	Marble chips tiles grey cement 8" x 6'" x 3/4- = 203 x 152 x 19 mm (3/8- x 3/8" = 9, 9 mm topping & base).	851.50	Sq.Yd.	1018.39	Sq.m
1186	Marble chips tiles grey cement 8" x 6" x 3/4" = 203 x 152 x 19 mm (3/8' x 3/8" = 9, 9, mm topping & base).	780.00	Sq.Yd.	932.88	Sq.m
1186a	Marble chips tiles grey cement 8" x 8" x 3/4" = 203 x 152 x 19 mm (3/8' x 3/8" = 9, 9, mm topping & base).	780.00	Sq.Yd.	932.88	Sq.m
1201	Marble chips tiles grey cement chequered or ribbed 13" x 8" x 1" = 331 x 203 x 26 mm (1/2" x 1/2" = 12, 12 mm topping & base).	936.00	Sq.Yd.	1119.46	Sq.m
1202	Marble chips tiles grey cement chequered or ribbed dark shade 13" x 8" x 1" = 331 x 203 x 25 mm (1/2" x 1/2" = 13, 13 mm topping & base).	971.10	Sq.Yd.	1161.44	Sq.m
1190	Marble chips tiles grey cement dark shade pigment 12" x 12" x 1" = 305 x 305 x 26 mm (1/2" x 1/2" = 13, 13 mm topprng & base)	1030.00	Sq.Yd.	1231.88	Sq.m
1193	Marble chips tiles grey cement dark shade pigment 12" x 12" x 1-1/4" = 305 x 305 x 32 mm(3/4" x 1/2" = 19, 12 mm topping & base).	975.00	Sq.Yd.	1166.10	Sq.m
1211	Marble chips tiles grey cement dark shade pigment 12" x 8" x 3/4" = 305 x 203 x 19 mm (3/8" x 3/8" = 9, 9 mm topping & base).	812.50	Sq.Yd.	971.75	Sq.m
1196	Marble chips tiles grey cement dark shade pigment 16' x 16" x 1-5" = 406 x 406 x 38 mm (1" x 1/2" = 25 mm, 13 mm) topping & baae.	1530.00	Sq.Yd.	1829.88	Sq.m
1205	Marble chips tiles grey cement dark shade pigment 6" x 6" x 3/4" = 152 x 152 x 19 mm (3/8" x 3/8" ^ 9, 9 mm topping & base).	877.50	Sq.Yd.	1049.49	Sq.m
1208	Marble chips tiles grey cement dark shade pigment 8" x 6" x 3/4" = 203 x 152 x 19 mm (3/8" x 3/8" = 9, 9 mm topping & base).	910.00	Sq.Yd.	1088.36	Sq.m
1187	Marble chips tiles grey cement dark shade pigment 8" x 8" x 3/4" = 203 x 203 x 19mm (3/8" x 3/8' = 9, 9, mm topping & base).	865.80	Sq.Yd.	1035.50	Sq.m
1198	Marble chips tiles grey cement flowered or. patterned 8" x 8" x 3/4" = 203 x 203 x 19 mm (3/8" x 3/8" = 9, 9 mm topping & base).	936.00	Sq.Yd.	1119.46	Sq.m
1200	Marble chips tiles grey cement flowered or patterned light shade 16' x 16" x 1-1/4" = 406 x 406 x 32 mm (3/4" x 1/2" = 19, 13 mm topping & base).	975.00	Sq.Yd.	1166.10	Sq.m
1212	Marble chips tiles grey cement light shade pigment 12" x 8" x 3/4" = 305 x 203 x 18 mm (3/8' x 3/8" = 9, 9 mm topping & base).	845.00	Sq.Yd.	1010.62	Sq.m
1195	Marble chips tiles grey cement light shade pigment 16" x 16" x 1.5" = 406 x 406 x 38 mm (1 x 1/2" = 25, 12 mm topping & base).	1500.00	Sq.Yd.	1794.00	Sq.m

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
1209	Marble chips tiles grey cement light shade pigment 8" x 6" x 3/4" = 203 x 152 x 19 mm (3/8" x 3/8" = 9, 9 mm topping & basa).	910.00	Sq.Yd.	1088.36	Sq.m
1189	Marble chips tiles in grey cement flowered or patterened 12" x 12" x 1" = 305 x 305 x ' 25 mm [1/2" x 1/2" = 13, 13 mm topping & base.	910.00	Sq.Yd.	1088.36	Sq.m
1184	Marble chips Tiles in grey cement with pigment of approved dark shade; size 8" x 8" x 3/4" = 203 x 203 x 19 mm, topping 1/4" (6.4 mm), base 1/2" (13 mm).	865.80	Sq.Yd.	1035.50	Sq.m
1183	Marble chips Tiles in grey cement; size 8" x 8" x 3/4" = 203 x 203 x 19 mm, topping 1/4" (6.4 mm), base 1/2" (13 mm).	793.00	Sq.Yd.	948.43	Sq.m
1183a	Marble chips Tiles in grey cement; size 8" x 8" x 3/4" = 203 x 203 x 19 mm, topping 1/4" (6.4 mm), base 1/2" (13 mm).	840.00	Sq.Yd.	1004.64	Sq.m
1188	Marble chips tiles in white cemeni, light sahade pigment: (8" x 8" x 3/4" = 203 x 203 x 19 mm (3/8' x 3/8 = 9, 9 mm toppng & base).	1007.50	Sq.Yd.	1204.97	Sq.m
1191	Marble chips tiles in white cement, light shade pigment 12" x12" x 1" = 305 x 305 x 25 mm (1/2" x 1/2" = 13 x 13 mm topping & base).	1040.00	Sq.Yd.	1243.84	Sq.m
1206	Marble chips tiles in white cement, light shade pigment 6" x 6" x 3/4" = 152 x 152 x 19 mm (3/8" x 3/8" = 9, 9 mm lopping &base).	1088.10	Sq.Yd.	1301.37	Sq.m
1185	Marble chips Tiles in white cement, light shade pigment; size 8" x 8" x 3/4" = 203 x 203 x 19 mm, topping 1/4" (6.4 mm), base y 1/2" (13 mm).	936.00	Sq.Yd.	1119.46	Sq.m
1203	Marble chips tiles white cement chequered or ribbed light shade 13" x 8" x 1" = 331 X 203 x 25 mm (1/2" x 1/2" = 13, 13 mm topping & base).	1053.00	Sq.Yd.	1259.39	Sq.m
1231	Marble chips tiles white cement flowered 6" x 6" x 3/4" = 152 x 152 x 19 mm.	1188.00	Sq.Yd.	1420.85	Sq.m
1194	Marble chips tiles white cement light shade pigment 12" x 12" x 1-1/4" = 305 x 305 x 32 mm (3/4" x 1/2" = 19, 12 mm topping & base).	1235.00	Sq.Yd.	1477.06	Sq.m
1197	Marble chips tiles white cement light shade pigment 16" x 16" x 1.5" = 406 x 406 x 38 mm (1" x 1/2" = 25 mm, 13 mm) topping & base.	1521.00	Sq.Yd.	1819.12	Sq.m
1246	Marble colored venyle asbestos tiles 20 . cm x 20 cm x 1-6 mm.	95.00	Sq.ft	1022.20	Sq.m
1245	Marble coloured venyle asbestos tiles 30 cm x 30 cm x 1.6 mm.	100.00	Sq.ft	1076.00	Sq.m
1244	Marble coloured venyle asbestos tiles 30 cm x 30 cm x 2-0 mm.	110.00	Sq.ft	1183.60	Sq.m
0562c	Marble Patti 1/2" thick 1-1/4" wide.	8.50	Rft	27.88	Ru.m.
0562a	Marble Patti 3/8" thick 1" wide.	6.25	Rft	20.50	Ru.m.
0562	Marble powder.	120.00	Cwt.	118.11	50 Kg.

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
1090	Marble slone slab of Peshawar & Ouetta origin 1-1/4" = 32 mm thick size 24" x 30" = 610 x 762 mm.	700.00	Sq.ft	7532.00	Sq.m
1070	Marble stone (khapcha) unfinished quarried stone (coloured).	250.00	Mnd.	334.91	50 Kg.
1069	Marble stone (khapcha) unfinished quarried stone (white).	225.00	Md.	301.41	50 Kg.
1134	Marble Stone 3/8" = 9 mm = 6" x 6" -152 x 152 mm.	70.00	Sq.ft	753.20	Sq.m
1135	Marble stone 3/8" = 9 mm 12" x 12" = 305 x 305 mm.	85.00	Sq.ft	914.60	Sq.m
1138	Marble stone 3/8" = 9 mm, above 144 sq. in = 93025 sq. mm.	100.00	Sq.ft	1076.00	Sq.m
1072	Marble stone chips (size zero to four nos.)	125.00	Mnd.	167.45	50 Kg.
1133	Marble Stone of Peshawar & Ouetta origin 1-1/2" = 38 mm, 6" x 12" - 152 x 305 mm ..	210.00	Sq.ft	2259.60	Sq.m
1091	Marble stone salb of Peshawar & Quetta origin 1-1/4" = 32 mm thick size 30" x 36" = 762 x 915 mm.	800.00	Sq.ft	8608.00	Sq.m
1075	Marble stone slab (3/4- = 19 mm thick) size 12" x 18" = 305 x 457 mm.	200.00	Sq.ft	2152.00	Sq.m
1073	Marble stone slab (3/4" = 19 mm thick) size 6" x 6" = 152 mm x 152 mm.	80.00	Sq.ft	860.80	Sq.m
N1073	Marble stone slab of Peshawar & Quetta origin 3/4" = 19 mm thick size 6" x 12" = 152 x 305 mm.	115.00	Sq.ft	1237.40	Sq.m
1074	Marble stone slab (3/4" = 19 mm thick) size 12" x 18" = 305 x 457 mm.	200.00	Sq.ft	2152.00	Sq.m
1076	Marble stone slab (3/4" = 19 mm thick) size 18" x 24" = 457 x 610 mm.	250.00	Sq.ft	2690.00	Sq.m
1078	Marble stone slab (3/4" = 19 mm thick) size 30" x 36" = 762 x 915 mm.	300.00	Sq.ft	3228.00	Sq.m
1077	Marble stone slab (3/4" = 79 mm thick) size 24" x 30" = 610 x 762 mm.	320.00	Sq.ft	3443.20	Sq.m
1096	Marble stone slab of Pesahwar & Quetta origin 1-1/2" = 38 mm thick size 18" x 24" = 457 x 610 mm.	350.00	Sq.ft	3766.00	Sq.m
1098	Marble stone slab of Peshawar & Ouetta origin 1-1/2" = 38 mm thick size 30" x 36" = 762 x 915 mm.	1350.00	Sq.ft	14526.00	Sq.m
1087	Marble stone slab of Peshawar & Ouetta origin 1-1/4" = 32 mm thick size 12" x 12" = 305 x 305 mm.	250.00	Sq.ft	2690.00	Sq.m
1087a	Marble stone slab of Peshawar & Ouetta origin 1-1/4" = 32 mm thick size 18" x 24" = 458 x 610 mm.	300.00	Sq.ft	3228.00	Sq.m

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
1092	Marble stone slab of Peshawar & Quetia origin 1-1/4" = 32 mm thick size 48" x 48" =1.22 m x 1.22m.	950.00	Sq.ft	10222.00	Sq.m
1080a	Marble stone slab of Peshawar & Quetta origin 1" = 19 mm thick size 12" x 12" = 305 x 305 mm.	200.00	Sq.ft	2152.00	Sq.m
1083a	Marble stone slab of Peshawar & Quetta origin 1" = 19 mm thick size 24" x 30" = 610 x 762 mm.	450.00	Sq.ft	4842.00	Sq.m
1082	Marble stone slab of Peshawar & Quetta origin 1" = 25 mm thick size 18" x 24" = 457 x 610 mm.	300.00	Sq.ft	3228.00	Sq.m
1084	Marble stone slab of Peshawar & Quetta origin 1" = 25 mm thick size 30" x 36" = 762 x 915 mm.	750.00	Sq.ft	8070.00	Sq.m
1085	Marble stone slab of Peshawar & Quetta origin 1" = 25 mm thick size 48" x 48" =1.22 m x 1.22 m.	850.00	Sq.ft	9146.00	Sq.m
1079a	Marble stone slab of Peshawar & Quetta origin 1" = 25 mm thick size 6" x 12" = 152 x 305 mm.	150.00	Sq.ft	1614.00	Sq.m
1099	Marble stone slab of Peshawar & Quetta origin 1-1/2" = 38 mm thick size 48" x 48" = 1.2 m 1.2 m.	1140.00	Sq.ft	12266.40	Sq.m
1093	Marble stone slab of Peshawar & Quetta origin 1-1/2" = 38 mm thick size 6" x 6" = 152 x 152 mm.	190.00	Sq.ft	2044.40	Sq.m
1088	Marble stone slab of Peshawar & Quetta origin 1-1/4" = 32 mm Thick size 12" x 18" = 305 x 457 mm.	250.00	Sq.ft	2690.00	Sq.m
1089	Marble stone slab of Peshawar & Quetta origin 1-1/4" = 32 mm thick size 18" x 24" = 457 x 610 mm.	375.00	Sq.ft	4035.00	Sq.m
1080	Marble stone slab of Peshawar & Quetta origin 3/4" = 19 mm thick size 12" x 12" = 305 x 305 mm.	180.00	Sq.ft	1936.80	Sq.m
1083	Marble stone slab of Peshawar & Quetta origin 3/4" = 19 mm thick size 24" x 30" = 610 x 762 mm.	250.00	Sq.ft	2690.00	Sq.m
1095	Marble stone slab of Peshawar & Quetta origin 3/4" = 19 mm thick size 48" x 48" = 1.8 x 1.8 m.	550.00	Sq.ft	5918.00	Sq.m
1094	Marble stone slab of Peshwar & Quena origin 1-1/2" = 38 mm thick si2e 12" x 12" = 305 x 305 mm.	325.00	Sq.ft	3497.00	Sq.m
1086	Marble stone slab of Peshwar & Quetta origin 1-1/4" = 32 mm thick size 6" x 12" = 152 x 305 mm.	190.00	Sq.ft	2044.40	Sq.m
1081	Marble stone slabof Peshawar & Quetta origin 1" = 25 mm thick size 12" x 18" = 305 x 457 mm.	250.00	Sq.ft	2690.00	Sq.m
0995	Masonite hard Board: 1/8" = 3 mm thick.	20.00	Sq.ft	215.20	Sq.m
C-0556	Material for shutter lasani 3/4"	75.00	Sft.	807.00	Sq.m.
1935	Maxphart 30/40 grade.	98412.00	Ton	96443.76	Tonne
1936	Maxphart 80/100 grade.	92500.00	Ton	90650.00	Tonne
0023	Mchine crushed boulders graded sizes 2" to 3/4" = 52 mm to 19 mm.	4500.00	% Cft.	1590.11	Cu.m.
1968a	Mechine made Guttka bricks thick 2" x 2" x 9"	20000.00	Thu Nos.	20000.00	Thu Nos.
1968	Mild Steel B.W.G. Pipe dia 1-1/2 inches (38 mm).	214.50	Rft	703.56	Ru.m.

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
1956a	Mineral fiber tiles for false ceiling size 2' x 2' x 12mm	80.00	Sft	860.80	Sqm
0545	Mortar / barium sulphate, cement & sand 1:1:3.	5080.00	Cwt.	5000.00	50kg.
2411	Mortar / Cement, sand 1:1.	494.43	Cft.	17463.09	Cum
22321	Mortar / Cement, sand 1:2.	364.50	Cft.	12874.21	Cum
2418	Mortar / Cement, sand 1:6.	193.57	Cft.	6836.83	Cum
2420	Mortar / Cement, sand 1:8.	167.21	Cft.	5905.97	Cum
0123	Mortar / clay mixed with cowdung & chopped bhossa 1:1	75.92	Cft.	2681.49	Cu.m.
22315	Mortar / coloured cement, mixed with Gray cement & pigment 1:2	1569.25	Cft.	55425.75	Cum
2395	Mortar / lime , surkhi 1:1-1/2.	214.65	Cft.	7581.26	Cum
22312	Mortar / lime , surkhi 1:2	191.99	Cft.	6780.91	Cum
2401	Mortar / lime Cement, sand 1:1:3.	360.80	Cft.	12743.47	Cum
2393	Mortar / lime, sand 1:2.	221.94	Cft.	7838.76	Cum
22314	Mortar / lime, sand 1:2:6	241.08	Cft.	8514.79	Cum
22313	Mortar / lime, sand 1:2:9	213.87	Cft.	7554.06	Cum
2421	Mortar /clay.	65.52	Cft.	2314.16	Cum
2430	Mortar/ vitryfied fire clay	350	Per Cft	12362.00	Cu.m.
2417	Mortar/cement, sand 1:3.	285.66	Cft.	10089.42	Cum
2416	Mortar/cement, sand 1:4.	241.09	Cft.	8515.34	Cum
2403	Mortar/cement, sand 1:5.	216.11	Cft.	7632.87	Cum
2404	Mortar/lime cement and sand 1:1:6.	237.77	Cft.	8398.06	Cum
2402	Mortar/lime, cement, sand 1:1:4.	289.46	Cft.	10223.82	Cum
2403a	Mortar/lime, cement, sand 1:1:5.	259.68	Cft.	9172.05	Cum
2406	Mortar/lime, cement, sand 1:1:8.	204.21	Cft.	7212.82	Cum
R1162	Moving machine for aluminium door (Floor mounted)	7500.00	Each	7,500.00	Each
0121	Mulmul cloth (width 36" = 914 mm)	40.00	Sq.Yd.	43.75	R.m.
22319	Mulmul cloth Labour fixing charges	3.00	Mtr	9.84	R.m.
0014	Murum.	2000.00	% Cft.	706.71	Cu.m.
2305	Nail roofing: galvanized iron cone headed 2-1/2" x 1/4" = 64 x 7 mm.	215.00	Grs	215.00	Grs
0249	Nails: ordinary of sizes	86.20	Lbs.	189.87	Kg
1007	Nalidar beam 24" x 39-1/2" x 9/32" (7,3 m x 1.00 m x 7,1 mm).	13400.00	Each	13400.00	Each
2249	Namda 1/16 inch thick = 1.6 mm thick	24.00	Sq.ft	258.24	Sq.m
2248	Namda 1/2 inch thick = 13 mm thick.	37.00	Sq.ft	398.12	Sq.m
2345	National flag' silken 6' x 3' ft = 1,83 x 0,91 mm size	130.00	Sq.ft	1398.80	Sq.m
2346	National flag: cotton 6' x 3' = 1.83 x 0.91m size	100.00	Sq.ft	1076.00	Sq.m
2347	National flag: wollen 6' x 3' = 1.83 x 0.91m size	385.00	Sq.ft	4142.60	Sq.m
0096	Neolite cement for rubber tiles.	2820.00	gal	2619.78	Litre
0002	Nitric acid.	70.32	Lbs.	154.89	Kg
R1178	Nuts bolts welding plates	50.00	Sft	538.00	Sq.m.
2309	Oil putty	115.00	Lbs.	253.30	Kg

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0885	One side burma teak other side local veneer density 600 sid quality 5/8" = 16 mm thick	165.00	Sq.ft	1775.40	Sq.m
22280	One side burma teak other side local veneer density 600 slandered quality 3/4" (19 mm thick).	180.00	Sq.ft	1936.80	Sq.m.
0871	One side burma teak other side local veneer density 600 std quality 1" =25 mm thick ...	220.00	Sq.ft	2367.20	Sq.m.
0868	One Side Burma Teak, other side local vaneer density 600 Std quality 1/2" = 13 mm thick..	118.00	Sq.ft	1269.68	Sq.m.
1139	Onyx 3/8" = 9 mm, above 144 sqin 92903 sq mm.	350.00	Sq.ft	3766.00	Sq.m
1110	Onyx sbb of Baluchistan origin 1" = 25 mm thick size 12" x 12" = 305 x 305 mm.	550.00	Sq.ft	5918.00	Sq.m
1112	Onyx siab of Baluchistan origin 1" = 25 mm thick size 18" x 24" = 457 x 610 mm	650.00	Sq.ft	6994.00	Sq.m
1107	Onyx siab of Baluchistan origin 3/4" = 19 mm thick size 48" x 48" = 1.22 x 1.22 m	750.00	Sq.ft	8070.00	Sq.m
1116	Onyx sisb of Baluchistan origin 1-1/4" = 32 mm thick size 6" x 6" = 152 x 152 mm.	350.00	Sq.ft	3766.00	Sq.m
1137	Onyx slab 3/8" = 9 mm 12" x 12" = 350 x 350 mm.	300.00	Sq.ft	3228.00	Sq.m
1136	Onyx slab 3/8" = 9 mm 6" x 6" = 152 x 152 mm.	200.00	Sq.ft	2152.00	Sq.m
1102	Onyx slab o1 Baluchistan origin 3/4" = 19 mm thick size 12" x 12" = 305 x 305 mm	500.00	Sq.ft	5380.00	Sq.m
1128	Onyx slab of Bakichistan origin 1-1/2" = 38 mm thick size 18" x 24" = 457 x 610 mm .	950.00	Sq.ft	10222.00	Sq.m
1125	Onyx slab of Baluchisatn origin 1-1/2" = 38 mm thick size 6" x 6" = 152 x 152 mm.	400.00	Sq.ft	4304.00	Sq.m
1109	Onyx slab of Baluchistan origin 1" = 25 mm thick dze 6" x 12" = 152 x 305 mm.	350.00	Sq.ft	3766.00	Sq.m
1111	Onyx slab of Baluchistan origin 1" = 25 mm thick size 12" x 18" = 305 x 457 mm.	550.00	Sq.ft	5918.00	Sq.m
1113	Onyx slab of Baluchistan origin 1" = 25 mm thick size 24" X 30" = 610 x 762 mm.	600.00	Sq.ft	6456.00	Sq.m
1114	Onyx slab of Baluchistan origin 1" = 25 mm thick size 30" x 36" = 762 x 915 mm.	700.00	Sq.ft	7532.00	Sq.m
1115	Onyx slab of Baluchistan origin 1" = 25 mm thick size 48" x 48" = 1.8 x 1.8 mm.	850.00	Sq.ft	9146.00	Sq.m
1108	Onyx slab of Baluchistan origin 1" = 25 mm thick size 6" x 6" = 152 x 152 mm.	325.00	Sq.ft	3497.00	Sq.m
1126	Onyx slab of Baluchistan origin 1-1/2" = 38 mm thick size 12" x 12" = 305 x 305 mm .	700.00	Sq.ft	7532.00	Sq.m
1127	Onyx slab of Baluchistan origin 1-1/2" = 38 mm thick size 12" x 18" = 305 x 457 mm .	800.00	Sq.ft	8608.00	Sq.m
1129	Onyx slab of Baluchistan origin 1-1/2" = 38 mm thick size 24" x 30" = 610 x 762 mm .	975.00	Sq.ft	10491.00	Sq.m
1130	Onyx slab of Baluchistan origin 1-1/2" = 38 mm thick size 30" x 36" = 76 x 915 mm.	1050.00	Sq.ft	11298.00	Sq.m
1131	Onyx slab of Baluchistan origin 1-1/2" = 38 mm thick size 48" x 48" = 1.22 x 1.22 m.	1100.00	Sq.ft	11836.00	Sq.m

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
1125	Onyx slab of Baluchistan origin 1-1/2" = 38 mm thick size 6" x 12" = 152 x 305 mm.	450.00	Sq.ft	4842.00	Sq.m
1117	Onyx slab of Baluchistan origin 1-1/4" = 32 - mm thick size 6" x 12" = 152 x 305 mm.	400.00	Sq.ft	4304.00	Sq.m
1118	Onyx slab of Baluchistan origin 1-1/4" = 32 mm thick size 12" x 12" = 305 x 305 mm .	600.00	Sq.ft	6456.00	Sq.m
1119	Onyx slab of Baluchistan origin 1-1/4" = 32 mm thick size 12" x 18" = 305 x 457 mm .	700.00	Sq.ft	7532.00	Sq.m
1120	Onyx slab of Baluchistan origin 1-1/4" = 32 mm thick size 18" x 24" = 457 x 610 mm .	800.00	Sq.ft	8608.00	Sq.m
1122	Onyx slab of Baluchistan origin 1-1/4" = 32 mm thick size 30" x 36" = 762 x 915 mm .	875.00	Sq.ft	9415.00	Sq.m
1123	Onyx slab of Baluchistan origin 1-1/4" = 32 mm thick size 48" x 48" = 1.8 x 1.8 mm.	900.00	Sq.ft	9684.00	Sq.m
1121	Onyx slab of Baluchistan origin 1-1/4" 32 = mm thick size 24" x 30" = 610 x 762 mm	850.00	Sq.ft	9146.00	Sq.m
1103	Onyx slab of Baluchistan origin 3/4" = 19 mm thick size 12" x 18" 305 x 457 mm.	450.00	Sq.ft	4842.00	Sq.m
1104	Onyx slab of Baluchistan origin 3/4" = 19 mm thick size 18" x 24" = 457 x 610 mm	500.00	Sq.ft	5380.00	Sq.m
1105	Onyx slab of Baluchistan origin 3/4" = 19 mm thick size 24" x 30" = 610 x 762 mm.	550.00	Sq.ft	5918.00	Sq.m
1113	Onyx slab of Baluchistan origin 3/4" = 19 mm thick size 30" x 36" = 762 x 915 mm .	600.00	Sq.ft	6456.00	Sq.m
1101	Onyx slab of Baluchistan origin 3/4" = 19 mm thick size 6 x 12" = 152 x 305 mm.	280.00	Sq.ft	3012.80	Sq.m
1100	Onyx slab of Baluchistan origin 3/4" = 19 mm thick size 6" x 6" = 152 x 152 mm.	250.00	Sq.ft	2690.00	Sq.m
1071	Onyx stone (Khapcha).	2052.82	Mnd.	2750.00	50 Kg.
0895	Other veneer board one side decorative sapele density 500 ch-gol teak 1" = 25 mm thick.	19000.00	%Sft.	2045.14	Sq.m.
0892	Other veneer board one side decorative sapele density 500 ch-gol teak 1/2" = 13 mm thick.	13500.00	%Sft.	1453.13	Sq.m.
0894	Other veneer board one side decorative sapele density 500 ch-gol teak 3/4" = 19 mm thick.	9000.00	%Sft.	968.75	Sq.m.
0003	Oxalic acid.	120.00	Lbs	264.32	Kg.
0751	P.V,C. Pipe Fittings: Y/Joint 1" = 25 mm.	175.00	Each	175.00	Each
0599	P.V.C All Purpose Pipes (normal dia): 2-1/2" = 64 mm.	185.00	Rft.	606.80	Ru.m
0666	P.V.C Pipe Fittings: Elbows 2" = 52 mm...	222.00	Each	222.00	Each
0716	P.V.C, Pipe Fittings: Reducers 2-1/2" = 64 mm.	295.00	Each	295.00	Each
0992	P.V.C. Corrugated Sheet Transparent or Translucent 2/5" (10 mm) 120" x 26" = 3.0 x 0.66 m.	3800.00	Each	3800.00	Each
0990	P.V.C. Corrugated Sheet Transparent or Translucent 2/5" 10 mm 72" x 26" = 1.8 x 0.66 m.	2280.00	Each	2280.00	Each
0991	P.V.C. Corrugated Sheet Transparent or Translucent 2/5" 10 mm 96" x 26" = 2.4 x 0.66 m.	3100.00	Each	3100.00	Each
2237	P.V.C. nosing 30 mm.	162.00	Rft.	531.36	Ru.m

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
2238	P.V.C. nosing 40 mm.	175.00	Rft.	574.00	Ru.m
2239	P.V.C. nosing 45 mm.	190.00	Rft.	623.20	Ru.m
2240	P.V.C. nosing 50 mm.	200.00	Rft.	656.00	Ru.m
0648	P.V.C. offeset 3" = 76 mm dia for rain water Pipe.	650.00	Each	650.00	Each
0649	P.V.C. offeset 4" = 102 mm dia for rain water Pipe.	880.00	Each	880.00	Each
0715	P.V.C. Pipe fittigs: Reducers 2" = 52 mm.	180.00	Each	180.00	Each
0679	P.V.C. Pipe Fittings Sockets 4" = 102 mm .	504.00	Each	504.00	Each
1327	P.V.C. Pipe Fittings Sockets 4" = 102 mm. ('D' class).	450.00	Each	450.00	Each
0693	P.V.C. Pipe Fittings: Bends 1" = 25 mm.	125.00	Each	125.00	Each
0691	P.V.C. Pipe Fittings: Bends 1/2" = 13 mm.	60.00	Each	60.00	Each
0695	P.V.C. Pipe Fittings: Bends 1-1/2" = 38 mm.	200.00	Each	200.00	Each
0694	P.V.C. Pipe Fittings: Bends 1-1/4" = 32 mm.	175.00	Each	175.00	Each
0696	P.V.C. Pipe Fittings: Bends 2" = 52 mm.	225.00	Each	225.00	Each
0697	P.V.C. Pipe Fittings: Bends 2-1/2" = 64 mm.	360.00	Each	360.00	Each
0698	P.V.C. Pipe Fittings: Bends 3" = 76 mm ('B' class).	469.00	Each	469.00	Each
0692	P.V.C. Pipe Fittings: Bends 3/4" = 19 mm.	70.00	Each	70.00	Each
0690	P.V.C. Pipe Fittings: Bends 3/8" = 9 mm.	45.00	Each	45.00	Each
0699	P.V.C. Pipe Fittings: Bends 4" = 102 mm ('B' class).	590.00	Each	590.00	Each
0703	P.V.C. Pipe Fittings: Cross 1" = 25 mm.	240.00	Each	240.00	Each
0701	P.V.C. Pipe Fittings: Cross 1/2" = 13 mm...	100.00	Each	100.00	Each
0705	P.V.C. Pipe Fittings: Cross 1-1/2" = 38 mm.	336.00	Each	336.00	Each
0704	P.V.C. Pipe Fittings: Cross 1-1/4" = 32 mm.	288.00	Each	288.00	Each
0706	P.V.C. Pipe Fittings: Cross 2" = 52 mm.	480.00	Each	480.00	Each
0707	P.V.C. Pipe Fittings: Cross 2-1/2" = 64 mm.	648.00	Each	648.00	Each
0708	P.V.C. Pipe Fittings: Cross 3" = 76 mm.	960.00	Each	960.00	Each
0702	P.V.C. Pipe Fittings: Cross 3/4" = 19 mm.	70.00	Each	70.00	Each
0700	P.V.C. Pipe Fittings: Cross 3/8" = 9 mm.	50.00	Each	50.00	Each
0709	P.V.C. Pipe Fittings: Cross 4" = 102 mm.	1296.00	Each	1296.00	Each
0663	P.V.C. Pipe Fittings: Elbows 1" = 25 mm.	125.00	Each	125.00	Each
0661	P.V.C. Pipe Fittings: Elbows 1/2" = 13 mm.	70.00	Each	70.00	Each
0665	P.V.C. Pipe Fittings: Elbows 1-1/2" = 38 mm.	200.00	Each	200.00	Each
0664	P.V.C. Pipe Fittings: Elbows 1-1/4" = 32 mm.	175.00	Each	175.00	Each
0668	P.V.C. Pipe Fittings: Elbows 3" = 76 mm ('B' class).	470.00	Each	470.00	Each
0662	P.V.C. Pipe Fittings: Elbows 3/4" = 19 mm.	75.00	Each	75.00	Each
0660	P.V.C. Pipe Fittings: Elbows 3/8" = 9 mm.	44.00	Each	44.00	Each
0669	P.V.C. Pipe Fittings: Elbows 4" = 102 mm ('D' class).	550.00	Each	550.00	Each
0683	P.V.C. Pipe Fittings: End Plugs 1" = 25 mm.	100.00	Each	100.00	Each
0681	P.V.C. Pipe Fittings: End Plugs 1/2" = 13 mm.	45.00	Each	45.00	Each
0685	P.V.C. Pipe Fittings: End Plugs 1-1/2" = 38 mm.	150.00	Each	150.00	Each
0684	P.V.C. Pipe Fittings: End Plugs 1-1/4" = 32 mm.	120.00	Each	120.00	Each
0686	P.V.C. Pipe Fittings: End Plugs 2" = 52 mm.	195.00	Each	195.00	Each
0687	P.V.C. Pipe Fittings: End Plugs 2-1/2" = 64 mm.	216.00	Each	216.00	Each
0688	P.V.C. Pipe Fittings: End Plugs 3" = 76 mm ('B' class).	300.00	Each	300.00	Each

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
1326	P.V.C. Pipe Fittings: End Plugs 3" = 76 mm (D' class).	490.00	Each	490.00	Each
0682	P.V.C. Pipe Fittings: End Plugs 3/4" = 19 mm.	75.00	Each	75.00	Each
0680	P.V.C. Pipe Fittings: End Plugs 3/8" = 9 mm.	60.00	Each	60.00	Each
0689	P.V.C. Pipe Fittings: End Plugs 4" = 102 mm ('B' class).	366.00	Each	366.00	Each
1325	P.V.C. Pipe Fittings: End Plugs 4" = 102 mm ('D' class).	600.00	Each	600.00	Each
0712	P.V.C. Pipe Fittings: Reducers 1" = 25 mm.	135.00	Each	135.00	Each
0710	P.V.C. Pipe Fittings: Reducers 1/2" = 13 mm.	65.00	Each	65.00	Each
0714	P.V.C. Pipe Fittings: Reducers 1-1/2" = 38 mm.	200.00	Each	200.00	Each
0716	P.V.C. Pipe Fittings: Reducers 1-1/4" = 32 mm.	180.00	Each	180.00	Each
0713	P.V.C. Pipe Fittings: Reducers 1-1/4" = 32 mm.	180.00	Each	180.00	Each
0717	P.V.C. Pipe Fittings: Reducers 3" = 76 mm..	600.00	Each	600.00	Each
0711	P.V.C. Pipe Fittings: Reducers 3/4" = 19 mm	90.00	Each	90.00	Each
0718	P.V.C. Pipe Fittings: Reducers 4" = 102 mm.	720.00	Each	720.00	Each
0761	P.V.C. Pipe Fittings: Reducing Elbow 1" = 25 mm.	120.00	Each	120.00	Each
0759	P.V.C. Pipe Fittings: Reducing Elbow 1/2" = 12 mm.	55.00	Each	55.00	Each
0764	P.V.C. Pipe Fittings: Reducing Elbow 2" = 52 mm.	250.00	Each	250.00	Each
0765	P.V.C. Pipe Fittings: Reducing Elbow 2-1/2" = 64 mm.	340.00	Each	340.00	Each
0766	P.V.C. Pipe Fittings: Reducing Elbow 3" = 76 mm.	400.00	Each	400.00	Each
0760	P.V.C. Pipe Fittings: Reducing Elbow 3/4" = 19 mm.	75.00	Each	75.00	Each
0758	P.V.C. Pipe Fittings: Reducing Elbow 3/8" =-9 mm.	65.00	Each	65.00	Each
0767	P.V.C. Pipe Fittings: Reducing Elbow 4" = 102 mm.	550.00	Each	550.00	Each
0721	P.V.C. Pipe Fittings: Reducing Tees 1" = 25 mm.	1140.00	Doz	1140.00	Doz
0719	P.V.C. Pipe Fittings: Reducing Tees 1/2" = 12 mm.	480.00	Doz	480.00	Doz
0723	P.V.C. Pipe Fittings: Reducing Tees 1-1/2" = 38 mm.	2040.00	Doz	2040.00	Doz
0722	P.V.C. Pipe Fittings: Reducing Tees 1-1/4" = 32 mm.	1800.00	Doz	1800.00	Doz
0724	P.V.C. Pipe Fittings: Reducing Tees 2" = 52 mm.	3600.00	Doz	3600.00	Doz
0725	P.V.C. Pipe Fittings: Reducing Tees 2-1/2" = 65 mm.	4200.00	Doz	4200.00	Doz
0726	P.V.C. Pipe Fittings: Reducing Tees 3" = 76 mm.	470.00	Doz	470.00	Doz
0720	P.V.C. Pipe Fittings: Reducing Tees 3/4" = 19 mm.	540.00	Doz	540.00	Doz
1322	P.V.C. Pipe Fittings: Reducing Tees 4" = 102 mm ('A' class).	1100.00	Each	1100.00	Each
1321	P.V.C. Pipe Fittings: Reducing Tees 4" = 102 mm ('B' class).	960.00	Each	960.00	Each
0727	P.V.C. Pipe Fittings: Reducing Tees 4" = 102 mm ('C' class).	800.00	Each	800.00	Each

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0768	P.V.C. Pipe Fittings: Socket Rubber Ring 2" = 52 mm.	800.00	Doz	800.00	Doz
0769	P.V.C. Pipe Fittings: Socket Rubber Ring 2-1/2" 64 mm.	800.00	Doz	800.00	Doz
0770	P.V.C. Pipe Fittings: Socket Rubber Ring 3" = 76 mm.	1060.00	Doz	1060.00	Doz
0771	P.V.C. Pipe Fittings: Socket Rubber Ring 4" = 100 mm.	1220.00	Doz	1220.00	Doz
22281	P.V.C. Pipe Fittings: Sockets 1" = 25 mm.	120.00	Each	120.00	Each
0671	P.V.C. Pipe Fittings: Sockets 1/2" = 12 mm.	45.00	Each	45.00	Each
0675	P.V.C. Pipe Fittings: Sockets 1-1/2" = 38 mm	200.00	Each	200.00	Each
0674	P.V.C. Pipe Fittings: Sockets 1-1/4" = 32 mm	170.00	Each	170.00	Each
0676	P.V.C. Pipe Fittings: Sockets 2" = 52 mm.	250.00	Each	250.00	Each
0677	P.V.C. Pipe Fittings: Sockets 2-1/2" = 64 mm	166.00	Each	166.00	Each
0678	P.V.C. Pipe Fittings: Sockets 3" = 76 mm ('B' class).	263.00	Each	263.00	Each
1328	P.V.C. Pipe Fittings: Sockets 3" = 76 mm .	504.00	Each	504.00	Each
0672	P.V.C. Pipe Fittings: Sockets 3/4" = 19 mm.	42.00	Each	42.00	Each
0670	P.V.C. Pipe Fittings: Sockets 3/8" = 9 mm..	25.00	Each	25.00	Each
0741	P.V.C. Pipe Fittings: Tapered Core 1" = 25 mm.	118.00	Each	118.00	Each
0739	P.V.C. Pipe Fittings: Tapered Core 1/2" = 13 mm.	78.00	Each	78.00	Each
0743	P.V.C. Pipe Fittings: Tapered Core 1-1/2" = 38 mm.	180.00	Each	180.00	Each
0742	P.V.C. Pipe Fittings: Tapered Core 1-1/4" = 32 mm.	160.00	Each	160.00	Each
0744	P.V.C. Pipe Fittings: Tapered Core 2" = 52 mm.	210.00	Each	210.00	Each
0746	P.V.C. Pipe Fittings: Tapered Core 3" = 76 mm ('B' class).	250.00	Each	250.00	Each
0740	P.V.C. Pipe Fittings: Tapered Core 3/4" = 19 mm.	90.00	Each	90.00	Each
0738	P.V.C. Pipe Fittings: Tapered Core 3/8" =9 mm.	60.00	Each	60.00	Each
0747	P.V.C. Pipe Fittings: Tapered Core 4" = 102 mm ('B' class).	300.00	Each	300.00	Each
0653	P.V.C. Pipe Fittings: Tees 1" = 25 mm ...	95.00	Each	95.00	Each
0651	P.V.C. Pipe Fittings: Tees 1/2" = 13 mm	50.00	Each	50.00	Each
0655	P.V.C. Pipe Fittings: Tees 1-1/2" = 38 mm	180.00	Each	180.00	Each
0654	P.V.C. Pipe Fittings: Tees 1-1/4" = 32 mm	160.00	Each	160.00	Each
0656	P.V.C. Pipe Fittings: Tees 2" = 52 mm ('B' class).	315.00	Each	315.00	Each
0657	P.V.C. Pipe Fittings: Tees 2-1/2" = 64 mm	450.00	Each	450.00	Each
0658	P.V.C. Pipe Fittings: Tees 3" = 76 mm ('D' class).	600.00	Each	600.00	Each
0652	P.V.C. Pipe Fittings: Tees 3/4" = 19 mm	60.00	Each	60.00	Each
0650	P.V.C. Pipe Fittings: Tees 3/8" = 9 mm.	480.00	Doz	480.00	Doz
0659	P.V.C. Pipe Fittings: Tees 4" = 102 mm	1110.00	Each	1110.00	Each
0731	P.V.C. Pipe Fittings: Vaive Sockets 1" = 25 mm.	200.00	Each	200.00	Each
0732	P.V.C. Pipe Fittings: Vaive Sockets 1-1/4" = 32 mm.	280.00	Each	280.00	Each
0757	P.V.C. Pipe Fittings: Valve socket 4" = 102 mm.	950.00	Each	950.00	Each
0729	P.V.C. Pipe Fittings: Valve Sockets 1/2" = 13 mm.	110.00	Each	110.00	Each
0733	P.V.C. Pipe Fittings: Valve Sockets 1-1/2" = 38 mm.	330.00	Each	330.00	Each

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0734	P.V.C. Pipe Fittings: Valve Sockets 2" = 52 mm.	360.00	Each	360.00	Each
0735	P.V.C. Pipe Fittings: Valve Sockets 2-1/2" = 64 mm.	450.00	Each	450.00	Each
0737	P.V.C. Pipe Fittings: Valve Sockets 3' = 76 mm ('B' class).	550.00	Each	550.00	Each
0730	P.V.C. Pipe Fittings: Valve Sockets 3/4" = 19 mm.	90.00	Each	90.00	Each
0728	P.V.C. Pipe Fittings: Valve Sockets 3/8" = 9 mm.	60.00	Each	60.00	Each
0749	P.V.C. Pipe Fittings: Y/Joint 1/2" = 13 mm....	50.00	Each	50.00	Each
0753	P.V.C. Pipe Fittings: Y/Joint 1-1/2" = 38 mm.	157.00	Each	157.00	Each
0752	P.V.C. Pipe Fittings: Y/Joint 1-1/4" = 32 mm.	90.00	Each	90.00	Each
0754	P.V.C. Pipe Fittings: Y/Joint 2" = 52 mm.	309.00	Each	309.00	Each
0755	P.V.C. Pipe Fittings: Y/Joint 2-1/2" = 64 mm.	450.00	Each	450.00	Each
0756	P.V.C. Pipe Fittings: Y/Joint 3" = 76 mm..	708.00	Each	708.00	Each
0750	P.V.C. Pipe Fittings: Y/Joint 3/4" = 19 mm.	100.00	Each	100.00	Each
0748	P.V.C. Pipe Fittings: Y/Joint 3/8" = 9 mm.	30.00	Each	30.00	Each
0757	P.V.C. Pipe Fittings: Y/Joint 4" = 102 mm.	1152.00	Each	1152.00	Each
0763	P.V.C. Pipe Fittings; Reducing Elbow 1-1/2" = 38 mm.	225.00	Each	225.00	Each
2236	P.V.C. ribbed water stop wide 4-1/2" = 115 mm.	172.80	Rft.	566.78	Ru.m
2235	P.V.C. ribbed water stop wide 6" = 152 mm.	216.00	Rft.	708.48	Ru.m
2234	P.V.C. ribbed water stop wide 9" = 229 mm.	334.80	Rft.	1098.14	Ru.m
0989	P.V.C. sheet plain (1 m x 2 m) thickness = 1 mm.	1050.00	Sheet	1050.00	Sheet
1239	P.V.C. skirting (2 mm).	140.00	Sq.ft	1506.40	Sq.m.
2227	P.V.C. socket dia 3" = 76 mm.	247.00	Each	247.00	Each
2228	P.V.C. socket dia 4" = 102 mm.	309.00	Each	309.00	Each
2231	P.V.C. water stop wide 12" = 305 mm.	450.00	Rft.	1476.00	Ru.m
2233	P.V.C. water stop wide 14-1/2" = 368 mm.	550.00	Rft.	1804.00	Ru.m
2229	P.V.C. water stop wide 18" = 457 mm.	675.00	Rft.	2214.00	Ru.m
22223	P.V.C. water stop wide 6" = 152 mm.	225.00	Rft.	738.00	Ru.m
2232	P.V.C. water stop wide 8" = 203 mm, 6mm thick	300.00	Rft.	984.00	Ru.m
0667	P.V.C.-Pipe Fittings: Elbows 2-1/2" = 64 mm.	290.00	Each	290.00	Each
22327	P/F 1:2 precast R.C.C Jalli or louvers upto 2" thick in regd,shape I/C form work removal.	21,655	Cft	21654.60	Cft
1956	P/L mild steel reinforcement bars.	9296.92	Cwt.	9150.51	50 Kg.
0139	Pacca Kam.	2250.00	Imgl	494.94	Litre
22282	Paint remover (Duco).	470.00	tin	470.00	Tin
2302	Paking: flexible, rubber wide 5" = 127 mm	100.00	Sq.ft	1076.00	Sq.m
2447	Parliament hinges brass oxidised 4" = 102 mm 13 gauge 2.1 mm.	3000.00	Doz	3000.00	Doz
2448	Parliament hinges brass oxidised 4" = 75 mm 14 gauge 1,8 mm thick.	2800.00	Doz	2800.00	Doz
0195	Parliamentary hinges brass heavy 3" x 3" x 1-1/4" = 76 x 76 x 32 mm sheet thick 14 gauge = 1,8 mm.	2280.00	Doz	2280.00	Doz
0194	Parliamentary hinges brass heavy 4" x 4" 1-1/4" = 102 x 102 x 32 mm sheet thick 12 gauge = 2.1 mm	3600.00	Doz	3600.00	Doz
0193	Parliamentary hinges brass heavy 5" x 5" x 1-1/4" = 127 x 127 x 32 mm sheet thick 1/4" = 6 mm.	4500.00	Doz	4500.00	Doz

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0196	Parliamentary hinges brass heavy oxidised 5" x 5" x 1-1/4" = 127 x 127 x 127 x 32 mm sheenhick 1/4" = 6mm.	4800.00	Doz	4800.00	Doz
0202	Parliamentary hinges Iron (heavy) 3" x 3" = 76 x 76 mm 14 gauge = 1.8 mm.	1080.00	Doz	1080.00	Doz
0201	Parliamentary hinges Iron (heavy) 4" x 4" = 102 x 102 mm 14 gauge = 1-8 mm.	1350.00	Doz	1350.00	Doz
0199	Parliamentary hinges iron (heavy) 6" x 6"= 152 x 152 mm 12 gauge = 2.1 mm thick .	3240.00	Doz	3240.00	Doz
0197	ParlimenCary hinges brass heavy oxidised 4" x 4" x 1-1/4" = 102 x 102 x 32 mm sheet thick 12 gauge 2.1 mm.	2484.00	Doz	2484.00	Doz
0198	Parltamsntary hinges brass heavy oxidised 3" x 3' x 1-1/4" = 80 x 80 x 32 mm sheet thick 14 gauge 1.8 mm.	2940.00	Doz	2940.00	Doz
0200	Partiamentry hinges iron (heavy) 5" x 5" = 127 x 127 mm 12 gauge = 2.1 mm thick .	2160.00	Doz	2160.00	Doz
R1163	Patch Mint "L"	2200.00	Each	2,200.00	Each
0540	Patent drier.	2200.00	Imgl	483.94	Litre
0540a	Patent drier.	69.14	oz	15.21	Litre
R1153	Pavement Marking non reflecting (CR) Paint	455.14	P.ltr	455.14	P.ltr
R1154	Pavement Marking non reflecting (TP) Paint	153.75	P.kg	153.75	P.kg
R1155	Pavement Marking reflecting (CR) Paint	665.55	P.ltr	665.55	P.ltr
R1156	Pavement Marking reflecting (TP) Paint	266.25	P.kg	266.25	P.kg
1971	Pegs : brass chromium plated.	1120.00	Doz	1120.00	Doz
1976	Pegs: brass casement stay, 8" = 203 mm long.	550.00	Each	550.00	Each
1970	Pegs: brass.	900.00	Doz	900.00	Doz
1975	Pegs: iron stay oxidised, size 9"= 229 mm	900.00	Doz	900.00	Doz
1974	Pegs: Iron stay, size 9" = 229 mm.	720.00	Doz	720.00	Doz
1972	Pegs: iron.	335.00	Doz	335.00	Doz
1973	Pegs: plastic.	435.00	Doz	435.00	Doz
1977	Pegs: wooden size 10" to 15" = 254 to 381mm.	100.00	Each	100.00	Each
1978	Pegs: wooden size 6" to 9" = 152 to 229 mm.	75.00	Each	75.00	Each
1006	Perforated sheets 5/32" = 4 mm thick with wooden frame.	348.00	Sq.ft	3744.48	Sq.m
1005	Perforated sheets 5/32" == 4 mm thick without wooden frame.	185.00	Sq.ft	1990.60	Sq.m
0505	Permacem cement paint.	833.48	Lbs	1835.86	Kg.
22283	Phool broom.	140.00	Each	140.00	Each
0544	Piaster of Paris (Powder).	1016.33	Cwt.	1000.32	50 Kg.
2356	Pigment of any colour.	270.00	Lbs	594.71	Kg.
0920	Pin Board: 400 density 1/2 inch (13 mm) thick.	5480.00	%Sft.	589.86	Sqm
2344	Pipe of galvanized iron, size 2-1/2" = 64 mm	449.86	Rft.	1475.54	R.m.
0923	Plain board density 400 1" = 25 mm thick .	6360.00	%Sft.	684.34	Sq.m
0922	Plain board density 400 3/4" = 19 mm thick	5480.00	%Sft.	589.65	Sq.m
0928	Plain board density 500 1" =25 mm thick.	7533.00	%Sft.	810.55	Sq.m
0927	Plain board density 500 3/4" 19 mm thick.	6805.00	%Sft.	732.22	Sq.m
0926	Plain board density 500 5/8" = 16 mm thick	6025.00	%Sft.	648.29	Sq.m

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0933	Plain Board Density 600 1" = 25 mm thick.	8140.00	%Sft.	875.86	Sq.m
0930	Plain Board Density 600 1/2" = 13 mm thick	5480.00	%Sft.	589.65	Sq.m
0932	Plain Board Density 600 3/4" = 19 mm thick.	7525.00	%Sft.	809.69	Sq.m
0929	Plain board density 600 5/16" = 8 mm thick.	5860.00	%Sft.	630.54	Sq.m
0931	Plain Board Density 600 5/8" = 16 mm thick	7125.00	%Sft.	766.65	Sq.m
0921	Plain Board: Density 400 5/8" = 16 mm thick.	5480.00	%Sft.	589.65	Sq.m
0924	Plain board: density 400, 1.5" = 38 mm thick.	7485.00	%Sft.	805.39	Sq.m
0925	Plain board: density 500, 1/2" = 13 mm thick.	5420.00	%Sft.	583.19	Sq.m
22284	Plast wood door fully pannalled 1-1/2 inchies (38 mm)	1088.00	Sft	11706.88	Sqm
22285	Plaster of Paris (1 Pkt 2.5 kg).	145.00	Pkt	145.00	Pkt
0925a	Plaster of Paris 19mm thick ceiling i/c suspension system	150.00	Sft	1614.00	Sqm
0568	Plastic emulsion (ICI)	4500.00	Imgl	989.88	Litre
0485	Plastic emulsion paint V.I.P. (Robbialac).	4900.00	Imgl	1077.87	Litre
22286	Polish colours.	100.00	pkt	100.00	Pkt
1002	Polythene sheet 0.005" = 500 gauge (0.05 mm thick).	6.00	Sft	64.56	Sq.m
0093	Portland Grey Cement (Imported).	15000.00	Ton	14700.00	Tonne
0293	Power Bolts Iron oxidised 9" = 229 mm.	3200.00	Doz	3200.00	Doz
2430c	Pre cast RCC slab 3' to 4-1/2' length and 1' width	60.00	Sft	645.60	Sq.m.
2430a	Pre cast RCC slab 3' to 4-1/2' length and 1-1/2' to 2' width	65.00	Sft	699.40	Sq.m.
2430d	Pre cast RCC slab exceeding 4-1/2' upto 6'-6", and 1' width	68.00	Sft	731.68	Sq.m.
2430b	Pre cast RCC slab exceeding 4-1/2' upto 6'-6", and 1-1/2' to 2' width	75.00	Sft	807.00	Sq.m.
2430f	Pre-cast RCC planks 8' x 8" x 2" (2438mm x 203mm x50mm).	68.00	Rft	223.04	Ru.m
0106	Pudlo.	65.00	Lbs	143.17	Kg.
2310	Pulley: dia 4 inches (102 mm).	12399.27	Cwt.	12204.01	50 kg.
1952	Pully steel.	1400.00	Each	1400.00	Each
0542	Putrifying Liquid.	1200.00	Imgl	263.97	Litre
22318	PVC / plastic venation strip blinds 10' x 5' = 50 Sft.	375.00	Rft.	0.00	Sqm
R1166	PVC /UPVC door shutter 1-1/2" thick	1500.00	Sft	1,500.00	Sft
22340	PVC board 2'x2' tiles ceiling (Plain)	110.00	Sft	110.00	Sft
22340a	PVC board 2'x2' tiles ceiling (Printed)	140.00	Sft	140.00	Sft
C-2145	PVC Gola	24.00	Rft.	78.72	Ru.m.
R1184	PVC Press sheet white	1750.00	Sft	18830.00	Sqm
R1172	PVC sheet wall panelling or lining (Plain)	150.00	Sft	150.00	Sft
R1173	PVC sheet wall panelling or lining (Printed)	175.00	Sft	175.00	Sft
0008a	PVC Tape	6.00	Rft.	19.68	Ru.m
22287	PVC. Door Hollow fully pannalled 1-1/2 " (38 mm)	1500.00	Sft	16140.00	Sqm
0593	PVC-All Purpose Pipes (Normal dia): 1/2" = 13 mm.	25.00	Rft.	82.00	Ru.m
0596	PVC-All Purpose Pipes (Normal dia): 1-1/4" = 32 mm.	79.00	Rft.	259.12	Ru.m
0598	PVC-All Purpose Pipes (Normal dia): 2" = 51 mm.	184.76	Rft.	606.01	Ru.m

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0594	PVC-All Purpose Pipes (Normal dia): 3" = 76 mm.	262.30	Rft.	860.34	Ru.m
0600	PVC-All Purpose Pipes (Normal dia): 3/4" = 19 mm.	37.00	Rft.	121.36	Ru.m
0601	PVC-All Purpose Pipes (Normal dia): 4" = 102 mm.	440.02	Rft.	1443.27	Ru.m
0595	PVC-All Purpose Pipes (Normal dia). 1" = 25 mm.	51.00	Rft.	167.28	Ru.m
0597	PVC-All Purpose Pipes (Normal dia): 1-1/2" = 38 mm.	94.92	Rft.	311.34	Ru.m
0592	PVC-All Purpose Pipes (Normal dia): 3/8" = 10 mm.	18.00	Rft.	59.04	Ru.m
22352	Quick lime	12.50	Lbs	27.53	Kg.
2430e	R.C.C Pre-cast girders H type size 6" x 9" (100 mm x 229mm) Class A.	350.00	Rft	1148.00	Ru.m
2430g	R.C.C Pre-cast girders size 4" x 9" (100 mm x 229mm) Class A.	250.00	Rft	820.00	Ru.m
0984a	R.C.C Pre-cast girders size 5" x 12" (127 mm x 304mm) Class A.	285.00	Rft	934.80	Ru.m
22330	R.C.C. pipe class 'C' 12" = 304 mm dia.	550.00	Rft.	1804.00	Ru.m
4299	R.C.C. pipe class 'C' 12" = 304 mm dia.	650.00	Rft.	2132.00	Ru.m
4295	R.C.C. pipe class 'C' 4" = 100 mm dia.	270.00	Rft.	885.60	Ru.m
4296	R.C.C. pipe class 'C' 6" = 152 mm dia.	480.00	Rft.	1574.40	Ru.m
2241	R.C.C. Pipe non pressure dia 4" = 102 mm.	180.00	Rft.	590.40	Ru.m
2242	R.C.C. Pipe non pressure dia 6" = 152 mm	265.00	Rft.	869.20	Ru.m
2243	R.C.C. Pipe non pressure dia 9" = 229 mm	400.00	Rft.	1312.00	Ru.m
0097	Rapid hardening cement.	17340.00	Ton.	16993.20	Tonne
0538	Raw linseed oil.	1500.00	Imgl	329.96	Litre
1980	Rawl plugs size 1" =25 mm.	250.00	Hund.	250.00	Hund.
1982	Rawl plugs size 2-1/2" = 64 mm.	350.00	Hund.	350.00	Hund.
1981	Rawl plugs size 3" = 76 mm.	400.00	Hund.	400.00	Hund.
0493	Ready mixed paint.	2200.00	Imgl	483.94	Litre
0549	Red and green oxide.	140.00	Lbs.	308.37	Kg.
0553	Red lead.	310.00	Lbs.	682.82	Kg.
0494	Redoxide paint.	2200.00	Imgl	483.94	Litre
0494a	Reflecting glass panes 6 mm thick (imported UAE).	425.00	P.Sft.	4574.70	Sqm
0101	Retarding agent.	1980.00	Cwt.	38.98	Kg.
2137	Rings: Brass (c.p) dia 1 inch (25 mm).	380.00	Doz.	380.00	Doz.
2135	Rings: Brass (c.p) dia 1-1/2 inches (38 mm) .	500.00	Doz.	500.00	Doz.
2136	Rings: Brass (c.p) dia 1-1/4 inches (32 mm).	450.00	Doz.	450.00	Doz.
3134	Rings: Brass (c.p) dia 2 inches (52 mm).	600.00	Doz.	600.00	Doz.
2133	Rings: Brass dia 1" = 25 mm.	380.00	Doz	380.00	Doz
2131	Rings: Brass dia 1-1/2" = 38 mm.	500.00	Doz	500.00	Doz
2132	Rings: Brass dia 1-1/4" = 32 mm.	450.00	Doz	450.00	Doz
2130	Rings: Brass dia 2" = 51 mm.	600.00	Doz	600.00	Doz
2254	Rings: P.V.C. dia 1" = 25 mm.	50.00	Doz	50.00	Doz
2252	Rings: P.V.C. dia 1-1/2" = 38 mm.	60.00	Doz	60.00	Doz
2253	Rings: P.V.C. dia 1-1/4" = 32 mm.	55.00	Doz	55.00	Doz
2251	Rings: P.V.C. dia 2" = 52 mm.	120.00	Doz	120.00	Doz

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2380	Rivets: length & dia 1/2" = 13 mm length 3" = 76 mm.	250.00	Lbs.	550.66	Kg.
22328	Road roller 10-12 ton capacity, hire charges.	25000	P.day	25000.00	P.day
22329	Road roller 6 ton capacity, hire charges.	17000	P.day	17000.00	P.day
R1147	Rock	33.00	P.Cft	33.00	P.Cft
2319	Rods: Carbon.	850.00	Doz	850.00	Doz
2313	Rolling shutters, G.I. sheet with all accessories & Fittings.	11900.00	Cwt.	11712.60	50 Kg.
2314	Rolling shutters, made of m.s. bars.	11900.00	Cwt.	11712.60	50 Kg.
1144	Roof tiles. C.C (1:2:4) size 12" x 9" (Khaprial).	5500.00	Hund.	5500.00	Hund.
1253	Roof tiles: earthen tiles: (burnt) 12" x 6" x 2" = 305 x 152 x 52 mm.	2500.00	Hund.	2500.00	Hund.
1252	Roof tiles: earthen tiles: (burnt) 12" x 12" x 2" = 305 x 305 x 52 mm.	5000.00	Hund.	5000.00	Hund.
1251	Roof tiles: manglore tiles ridge and hip.	60.00	Each	60.00	Each
1250	Roof tiles: manglore tiles.	60.00	Each	60.00	Each
22288	Rubber packing "U" type.	8.00	Rft	26.24	Ru.m.
2316	Rubber packing.	8.00	Rft	26.24	Ru.m.
22289	Rubber Sealing compound.	50.00	Lbs.	110.13	Kg.
1248	Rubber tiles 1/2" = 13 mm thick 12" x 12" = 305 x 305 mm.	120.00	Sq.ft	1291.20	Sq.m.
1249	Rubber tiles 1/2" = 13 mm thick 24" x 24" = 610 x 610 mm.	150.00	Sq.ft	1614.00	Sq.m.
1247	Rubber tiles 1/2" = 13 mm thick 8" x 8" = 203 x 203 mm.	100.00	Sq.ft	1076.00	Sq.m.
22325	Rate includes cartiage up to the site of work	70.00	Sft	753.20	Sq.m
0528	S.P.D vinyl emulsion (Robbialac)	2856.00	Imp.Gln		Litre
2386	Saches fastner 2-5/8" x 3/4" = 67 x 19 mm.	675.00	Doz	675.00	Doz
0033	Sal bailies 5" = 127 mm dia (average).	100.00	Rft.	328.00	R.m.
0032	Sal ballies 2" = 51 mm dia (average).	30.00	Rft.	98.40	R.m.
0031	Sal ballies 3" = 76 mm dia (average).	60.00	Rft.	196.80	R.m.
0048	Sal ballies 4" = 100 mm dia (average).	80.00	Cft	2825.60	C.m.
0034	Sal ballies 6" = 152 mm dia (average).	150.00	Rft.	492.00	R.m.
0035	sal ballies 7" = 178 mm dia (average).	180.00	Rft.	590.40	R.m.
2042	Sal ballies dia 2-1/2" = 64 mm, 9" = 127 mm long.	50.00	Rft.	164.00	R.m.
22290	Samad bond of approve quality.	290.00	Lbs.	638.77	Kg.
2288	Sand fine.	3500.00	%Cft	1236.75	Cu.m.
0009	Sand local.	3200.00	%Cft.	1130.74	Cu.m.
22291	Sand paper (Steel)	60.00	Each	60.00	Each
2312	Sand paper.	600.00	Doz	600.00	Doz
1918	Sand: Lawrencepur at Lahore.	7000.00	%Cft	2473.50	Cu.m.
1917	Sand: Lawrencepur at Peshawar.	4500.00	%Cft	1590.11	Cu.m.
1916	Sand: Lawrenepur at Rawalpindi..	3900.00	%Cft	1378.09	Cu.m.
2295	Sand; sharp clean graded.	3900.00	%Cft	1378.09	Cu.m.
0558	Sandrach (chandras).	225.00	Lbs.	495.59	Kg.
0036	Sat ballies 8" = 203 mm dia (average).	85.00	Rft.	278.80	R.m.
1900	Sawing charges for deodar wood..	100.00	Cft	3532.00	Cu.m.
1902	Sawing charges for kail wood.	100.00	Cft	3532.00	Cu.m.

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1905	Sawing charges for pan wood.	100.00	Cft	3532.00	Cu.m.
1966	Sawing charges for sal wood.	100.00	Cft.	3532.00	Cu.m.
1903	Sawing charges for teak wood.	150.00	Cft	5298.00	Cu.m.
1901	Sawing chrages for partal wood.	100.00	Cft	3532.00	Cu.m.
1904	Sawing chrages for sheshum wood..	150.00	Cft	5298.00	Cu.m.
R1175	Scaffolding / Electricity cost	120.00	Sft	1291.20	Sq.m.
0111	Screen bajri (malir).	4500.00	%Cft	1590.11	Cu.m.
0118	Screen graded bajri 1" = 56 mm down gauge (malir).	4200.00	%Cft	1484.10	Cu.m.
0111r	Screen graded bajri 1/2" size and down gauge 13 mm.	4400.00	%Cft	1554.77	Cu.m.
0112	Screen graded bajri 1/4" to 3/16' size = 6 mm to 4.5 mm.	4200.00	%Cft	1484.10	Cu.m.
0017	Screen graded bajri 3/4" to 3/16" and down gauge	4500.00	%Cft	1590.11	Cu.m.
0113	Screen graded bajri 3/8"' to 3/16" size == 9 mm to 4.5 mm.	4300.00	%Cft	1519.43	Cu.m.
0368	Screen graded bajri at Lahore 1/4" to 3/16" = 6 mm to 4.5 mm size.	9000.00	%Cft	3180.21	Cu.m.
0366	Screen graded bajri at Lahore 3/4" to 3/16" = 19 to 4.5 mm size.	9000.00	%Cft	3180.21	Cu.m.
0367	Screen graded bajri **at Lahore** 3/8" to 3/16" = 9 to 4.5 mm size.	9000.00	%Cft	3180.21	Cu.m.
0360	Screen graded bajri at Peshawar 3/4" to 3/16" = 19 to 4.5 mm size.	4000.00	%Cft	1413.43	Cu.m.
0361	Screen graded bajri at Peshawar 3/8" to 3/16" = 9 to 4.5 mm size.	4500.00	%Cft	1590.11	Cu.m.
0111	Screen graded bajri at Quetta 1/4" to3/16" = 6 to 4.5 mm size.	3000.00	%Cft	1060.07	Cu.m.
0362	Screened graded bajri at Peshawar 1/4" to 3/16" = 6 to 4.5 mm size.	4000.00	%Cft	1413.43	Cu.m.
0363	Screened graded bajri at Quetta 3/4" to 3/16" = 19 to 4.5 mm size.	3200.00	%Cft	1130.74	Cu.m.
0364	Screened graded bajri at Quetta 3/8" to 3/16" = 9 to 4.5 mm size.	3500.00	%Cft	1236.75	Cu.m.
0256	Screw Brass (c.p.) 1-1/2" = 38 mm size.	388.00	Grs.	388.00	Grs.
0260	Screw Brass (c.p.) 1-1/4" = 32 mm.	744.00	Grs.	744.00	Grs.
2199	Screw Brass (oxidized) 1-1/2" = 38 mm size.	778.00	Grs.	778.00	Grs.
0258	Screw Brass (oxidized) 1-1/4" = 32 mm size..	410.00	Grs.	410.00	Grs.
0255	Screw Brass 3" = 76 mm size	3576.00	Grs.	3576.00	Grs.
0253	Screw Iron (c.p.) 1" == 25 mm size.	290.00	Grs.	290.00	Grs.
0254	Screw Iron (c.p.) 1/2" = 13 mm size.	190.00	Grs.	190.00	Grs.
0252	Screw Iron (c.p.) 1-1/2" = 38 mm size.	390.00	Grs.	390.00	Grs.
A0250	Screws (2-1/2"x 10)	120.00	Lbs	120.00	P.kg
0265	Screws (Brass): 1" = 25 mm..	518.00	Grs.	518.00	Grs.
0267	Screws (Brass): 1/2" = 12 mm.	344.00	Grs.	344.00	Grs.
0264	Screws (Brass): 1-1/4" = 32 mm.	344.00	Grs.	344.00	Grs.
0266	Screws (Brass): 3/4" = 19 mm..	452.00	Grs.	452.00	Grs.
0273	Screws (Iron): 1" = 25 mm.	144.00	Grs.	144.00	Grs.

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0275	Screws (Iron): 1/2" = 13 mm.	108.00	Grs.	108.00	Grs.
0271	Screws (Iron): 1-1/2" = 38 mm.	223.20	Grs.	223.20	Grs.
0272	Screws (Iron): 1-1/4" = 32 mm.	194.40	Grs.	194.40	Grs.
0270	Screws (Iron): 2" = 52 mm.	345.60	Grs.	345.60	Grs.
0269	Screws (Iron): 2-1/2" = 64 mm.	424.80	Grs.	424.80	Grs.
0268	Screws (Iron): 3" = 76 mm.	496.80	Grs.	496.80	Grs.
0274	Screws (Iron): 3/4" = 19 mm.	115.20	Grs.	115.20	Grs.
0258	Screws Brass (Anodized) 1-1/4" = 32 mm size.	356.00	Grs.	356.00	Grs.
0257	Screws Brass (Anodized) 3/4 inch (19 mm) size.	236.00	Grs.	236.00	Grs.
0261	Screws Brass (c.p.): 1" = 25 mm.	236.00	Grs.	236.00	Grs.
0263	Screws Brass (c.p.): 1/2" = 13 mm..	216.00	Grs.	216.00	Grs.
0262	Screws Brass (c.p.): 3/4" = 19 mm..	216.00	Grs.	216.00	Grs.
2213	Screws Brass (oxidised) 1" = 25 mm size .	356.00	Grs.	356.00	Grs.
2215	Screws Brass (oxidised) 1/2" = 13 mm size.	260.00	Grs.	260.00	Grs.
2214	Screws Brass (oxidised) 3/4" = 19 mm size.	344.00	Grs.	344.00	Grs.
0259	Screws Brass size 1-1/2" = 38 mm.	972.00	Grs.	972.00	Grs.
2369	Screws cone headed galvanised 2-1/2" x 1/4" (64 mm to 6 mm).	668.00	Grs.	668.00	Grs.
2225	Screws: aluminium size 3/4" = 19 mm.......	668.00	Grs.	668.00	Grs.
2226	Screws: clamping 4" = 102 mm.	130.00	Doz	130.00	Doz
2304	Screws: Galvanized Iron cone headed. 2-1/4" to 1/4" (57 mm to 6 mm).	668.00	Grs.	668.00	Grs.
2221	Screws: Iron (oxidised) 1" = 25 mm size..	172.00	Grs.	172.00	Grs.
2219	Screws: Iron (oxidised) 1-1/2" = 38 mm size.	300.00	Grs.	300.00	Grs.
2220	Screws: Iron (oxidised) 1-1/4" = 32 mm size.	236.00	Grs.	236.00	Grs.
2218	Screws: Iron (oxidised) 2" = 51 mm size....	368.00	Grs.	368.00	Grs.
2217	Screws: Iron (oxidised) 2-1/2" = 64 mm size.	410.00	Grs.	410.00	Grs.
2216	Screws: Iron (oxidised) 3" = 76 mm size.	496.00	Grs.	496.00	Grs.
2222	Screws: Iron (oxidised) 3/4" = 19 mm size	140.00	Grs.	140.00	Grs.
2223	Screws: Iron oxidised 1/2" = 13 mm size.	96.00	Grs.	96.00	Grs.
2224	Screwss: aluminium size 1-1/2" = 38 mm......	972.00	Grs.	972.00	Grs.
0559b	Sealer ICI	4250.00	Imgl	934.89	Litre
0350	Self bracket of M.S. flats 6" x 8" = 152 x 203 mm.	690.00	Doz	690.00	Doz
0352	Self bracket of M.S. flats: 10" x 12" = 254 x 305 mm.	810.00	Doz	810.00	Doz
0353	Self bracket of M.S. flats: 12" x 14" = 305 x 357 mm.	900.00	Doz	900.00	Doz
0348	Self bracket of M.S. flats: 4" x 4" = 102 x 102 mm.	528.00	Doz	528.00	Doz
0349	Self bracket of M.S. flats: 5" x 6" = 127 x 152 mm.	400.00	Doz	400.00	Doz
0351	Self bracket of M.S. flats: 8" x 10" = 203 x 254 mm.	750.00	Doz	750.00	Doz
0534	Shahinsha varnish.	1505.00	Imgl	331.06	Litre
2293	Sheath: labour charges to install.	20.00	Rft.	65.60	Ru.m
2008	Sheath: size 37 mm external and 32 mm internal dia (hudera Rigid).	200.00	Rft	656.00	Ru.m.
2010	Sheath: size 37 mm external and 32 mm internal dia (self coupling welded).	160.00	Rft	524.80	Ru.m.
2009	Sheath: size 48 mm external and 42 mm internal dia (hydra rigid).	220.00	Rft	721.60	Ru.m.

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2011	Sheath: size 48 mm external and 42 mm internal dia (self coupling welded).	100.00	Rft	328.00	Ru.m.
2338	Shingle: selected 1/4" to 1/2" = 6 to 13 mm.	3800.00	%Cft	1342.76	Cu.m.
1958	Shoe of strainer:	550.00	Each	550.00	Each
R1182	Shutter board 3/4" thick	4900.00	Sft.	52724.00	Sq.m.
R1085	Shuttering	70.00	Sft.	753.20	Sq.m.
0529	Sigma-wall.	1200.00	Imgl	263.97	Litre
22292	Silicon filler (Large Imported).	245.00	tube	245.00	tube
R1190	Sliding 10" channel	200.00	Each	200.00	Each
R1189	Sliding 18" channel	360.00	Each	360.00	Each
0330	Sliding Bolts Brass (c.p.) 10" x 5/8" = 254 x 16 mm.	2035.00	Each	2035.00	Each
0329	Sliding Bolts Brass (c.p.) 12" x 5/8" = 305 x 16 mm.	2300.00	Each	2300.00	Each
0332	Sliding Bolts Brass (c.p.) 6" x 1/2" = 152 x 13 mm.	1200.00	Each	1200.00	Each
0331	Sliding Bolts Brass (c.p.) 9" x 5/8" = 229 x 16 mm.	1980.00	Each	1980.00	Each
0280	sliding Bolts Brass (oxidised) 12" = 305 mm long x3/4" = 19 mm.	2500.00	Each	2500.00	Each
0282	Sliding Bolts Brass (oxidised) 6" = 152 mm long x 1/2" = 13 mm.	1075.00	Each	1075.00	Each
0281	Sliding Bolts Brass (oxidised) 9" = 229 mm long x 5/8" = 16 mm.	1990.00	Each	1990.00	Each
0282ar	Sliding Bolts Brass 6" = 152 mm long x 1/2" = 13 mm.	1000.00	Each	1000.00	Each
0334	Sliding Bolts Brass heavy type 10" x 5/8" = 254 x 16 mm.	23400.00	Doz	23400.00	Doz
0328	Sliding Bolts Brass oxidised 10" x 5/8" = 254 x 16 mm.	2050.00	Each	2050.00	Each
0277	sliding Bolts Brass sections heavy 12" x 3/4" =305 x 19 mm.	2800.00	Each	2800.00	Each
0278	Sliding Bolts Brass sections heavy 9" x 5/8" = 229 x 16 mm.	2200.00	Each	2200.00	Each
0289	Sliding Bolts Iron 15" = 381 mm size.	900.00	Each	900.00	Each
0333	sliding Bolts Iron 8" x 5/8" = 254 x 16 mm.	300.00	Each	300.00	Each
0283	Sliding Bolts iron heavy 12" = 305 mm long x 3/4" = 19 mm.	7800.00	Doz	7800.00	Doz
0285	Sliding Bolts Iron heavy 6" = 152 mm long x 1/2" = 13 mm.	4600.00	Doz	4600.00	Doz
0284	Sliding Bolts Iron heavy 9" = 229 mm long x 5/8" = 16mm.	570.00	Each	570.00	Each
0336	Sliding Bolts Iron oxidised 10" x 5/8" = 254 x 16 mm.	590.00	Each	590.00	Each
0335	Sliding Bolts Iron oxidised 12" x 3/4" = 305 x 19 mm.	610.00	Each	610.00	Each
0338	Sliding Bolts Iron oxidised 6" x 1/2" = 152 x 13 mm.	390.00	Each	390.00	Each
0337	Sliding Bolts Iron oxidised 9" x 5/8" = 229 x 16 mm.	580.00	Each	580.00	Each

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2388	Sliding Bolts, 10" x 5/8" = 254 x 16 mm Iron heavy type.	6960.00	Doz	6960.00	Doz
2178b	Sliding Channels per draws	350.00	P.Set	350.00	P.Set
0531	Snowcem (local grey colour).	8900.00	Cwt.	8759.84	50 Kg.
1960	Socket special, Brass:.	700.00	Each	700.00	Each
2209	Socket, Brass, for floor.	840.00	Doz	840.00	Doz
2211	Socket, Iron.	350.00	Doz	350.00	Doz
2210	Socket: aluminium, for floor.	480.00	Doz	480.00	Doz
R1187	Socks	180.00	Rft.	590.40	Ru.m
22293	Soda washing	49.90	Lbs.	109.91	Kg.
0852	Soft board 1/2" = 13 mm thick (density 600).	5470.00	%Sft.	588.79	Sq.m.
R1098	Soil Class A4	12.00	P.Cft	423.84	Cu.m.
R1100	Soil Class A5	8.00	P.Cft	282.56	Cu.m.
0539	Solignum..	6000.00	Imgl	1319.84	Litre
1060	Soling stone 6" to 9" (152 mm to 229 mm) size.	3400.00	%Cft	1201.41	Cu.m.
22294	Spirit	1290.00	Imgl	283.77	Litre
2341	Spirit: methylated.	1400.00	Imgl	307.96	Litre
2261	Springs, helical: Brass, double action, size 4" = 100 mm.	740.00	Each	740.00	Each
2260	Springs, helical: Brass, double action, size 5" = 127 mm.	790.00	Each	790.00	Each
2259	Springs, helical: Brass, double action, size 6" = 152 mm.	880.00	Each	880.00	Each
2265	Springs, helical: Iron, size 4" = 100 mm.....	500.00	Each	500.00	Each
2264	Springs, helical: Iron, size 6" = 152 mm.	600.00	Each	600.00	Each
2263	Springs, Iron: double action size 5" = 127 mm.	650.00	Each	650.00	Each
2262	Springs, Iron: double action, size 6" = 152 mm.	800.00	Each	800.00	Each
0115	Spun yarn mixed with maxphalt composition for jointing.	50.00	Each	50.00	Each
R1176	Stainless steel railing 2" dia pipe & 4 Nos pipe 3/4" complete i/c wastage..	1500.00	Rft.	4921.50	Mtr
R1145	Steel Casing for piles	295000.00	P.Ton	295000.00	P.Ton
0419	Steel cupboard locks, 6 level, 1/4" = 6 mm (china make) nozzle project.	550.00	Each	550.00	Each
2281	Steel doors: fully glazed with frame m.s. bottom/rail including fabrication & painting without glasses, double leaf.	520.00	Sq.ft	5595.20	Sq.m
2280	Steel doors: fully glazed with frame m.s. bottom/rail including fabrication & painting without glasses, single leaf.	460.00	Sq.ft	4949.60	Sq.m.
2283	Steel doors: fully panelled, double leaf.	760.00	Sq.ft	8177.60	Sq.m.
2282	Steel doors: fully panelled, single leaf.	700.00	Sq.ft	7532.00	Sq.m.
2289	Steel doors: hot dipped galnanized with frame partly glazed and partly panelled, single leaf.	690.00	Sq.ft	7424.40	Sq.m.
2278	Steel doors: hot dipped Galvanised fully with frame-single leaf.	1070.00	Sq.ft	11513.20	Sq.m.
2290	Steel doors: hot dipped Galvanized with frame partly glazed and partly panelled, double leaf.	950.00	Sq.ft	10222.00	Sq.m.

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2287	Steel doors: hot dipped Galvanized, double leaf, fully panelled with G.I. sheet.	900.00	Sq.ft	9684.00	Sq.m.
1469	Steel doors: hot dipped Galvanized, fully Galvanized with frame, double leaf.	950.00	Sq.ft	10222.00	Sq.m.
2286	Steel doors: hot dipped Galvanized, single leaf, fully panelled with G.I. sheet.	950.00	Sq.ft	10222.00	Sq.m.
2285	Steel doors: partly glazed and partly panelled with m.s. sheet double leaf.	900.00	Sq.ft	9684.00	Sq.m.
2284	Steel doors: partly glazed and partly panelled with m.s. sheet single leaf.	950.00	Sq.ft	10222.00	Sq.m.
3515	Steel gate collapsible with vertical channels, flat iron diagonals.	650.00	Sft.	6994.00	Sq.m.
2267	Steel hung windows, hot dipped Galvanised without glass, double leaf.	415.00	Sq.ft	4465.40	Sq.m.
2268	Steel hung windows, hot dipped Galvanised without glass, double leaf.	465.00	Sq.ft	5003.40	Sq.m.
2196	Steel joist.	10160.00	Cwt.	10000.00	50 Kg.
R1139	Steel Metal bearing devices	245.00	P.kg	245.00	P.kg
2276	Steel sashes: fized without glasses.	175.00	Sq.ft	1883.00	Sq.m.
2275	Steel sashes: Hot dipped Galvanised partly fixed party hunged.	320.00	Sq.ft	3443.20	Sq.m.
2274	Steel sashes: hot dipped Galvanised without glasses.	320.00	Sq.ft	3443.20	Sq.m.
2277	Steel sashes: partly hunged & partly fixed.	310.00	Sq.ft	3335.60	Sq.m.
2270	Steel sky lights fixed made of crittal or equivalent standard.	400.00	Sq.ft	4304.00	Sq.m.
2266	Steel sky lights: providing and fixing hot dipped Galvanised fully glazed.	400.00	Sq.ft	4304.00	Sq.m.
2273	Steel window fully glazed-partly fixed and partly hunged.	600.00	Sq.ft	6456.00	Sq.m.
2272	Steel windows, double leaf hung.	600.00	Sq.ft	6456.00	Sq.m.
2269	Steel windows, partly hunged and partly fixed hot dipped Galvanised.	600.00	Sq.ft	6456.00	Sq.m.
2271	Steel windows, single leaf, hung..	600.00	Sq.ft	6456.00	Sq.m.
R1146	Steel wire mesh 4" x 4"	190.00	Kg	190.00	Kg
1021	Steel: deformed bars (structural grade) 40,000 psi.	9296.92	Cwt.	9150.51	50 Kg.
1022	Steel: reinforcement bars hard graded Deformed (minium yield point 60,000 psi).	9906.55	Cwt.	9750.54	50 Kg.
0050	Stiff rubber 1-1/2" x 7/16" = 38 mm x 10" mm	25.00	Rft.	82.00	Ru.m
0058	Stone 6" x 6" x 2-1/2" = 152 x 152 x 64 mm chizelled.	130.00	Each	130.00	Each
0059	Stone 9" x 4" x 2-1/2" = 229 x 102 x 64 mm chizelled.	130.00	Each	130.00	Each
0022a	Stone ballast hand broken 1" to 1/2" = 25 mm to 13 mm.	3450.00	%Cft.	1219.08	Cu.m.
0022	Stone ballast hand broken 1-1/2" to 1" = 38 mm to 25 mm.	3350.00	%Cft.	1183.75	Cu.m.

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Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0021	Stone ballast hand broken 2" to 1-1/2" = 52 mm to 38 mm.	3260.00	%Cft	1151.94	Cu.m.
0020	Stone ballast hand broken 3" to 2-1/2" = 76 mm to 64 mm.	3150.00	%Cft	1113.07	Cu.m.
R1132	Stone Random Class "A"	31.50	P.Cft	31.50	P.Cft
R1133	Stone Random Class "B"	35.00	P.Cft	35.00	P.Cft
R1134	Stone Random Class "C"	36.00	P.Cft	36.00	P.Cft
R1135	Stone Random Class "D"	38.00	P.Cft	38.00	P.Cft
1931	Stone: building approved size (superior).	5050.00	%Cft	1784.45	Cu.m.
1932	Stone: dust (powder).	1670.00	%Cft	590.11	Cu.m.
1132	Stone: dust (powder).	125.00	Cwt.	123.03	50 Kg.
1930	Stone: rubble of large size.	3000.00	%Cft	1060.07	Cu.m.
22350	Stop valve 40mm dia PPRC pipe	400.00	No	400.00	No
0292	Stopper Iron.	175.00	Each	175.00	Each
0290	Stopper wooden.	32.00	Each	32.00	Each
0291	Strap flat Iron..	145.00	Each	145.00	Each
1953	Strings/cotton:	158.80	Lbs.	349.78	Kg
0322	Sulphate resistant cement.	940.00	Cwt.	925.20	50 Kg.
0089	Sulphate resistant cement.	16000.00	Ton	15680.00	Tonne
0004	Sulphuric acid.	131.58	Lbs.	289.82	Kg
0073	Sundried bricks 9" x 4-3/8"x 2-11/16" = 229 x 111 x 68 mm, First class.	9000.00	Thou	9000.00	Thou
a123	Surface area comes to 2x33'-4" x 4'= 267Sft	50.00	Sft	538.00	Sq.m.
0491	Surfix boiler composition (exterior).	9490.00	Imgl	2087.55	Litre
0492	Surfix boiler composition (interior).	9250.00	Imgl	2034.76	Litre
0012	Surkhi.	2500.00	%Cft	883.39	Cu.m.
0126	Sweet earth.	2750.00	%Cft	971.73	Cu.m.
0533	Synthetic clear varnish.	1750.00	Imgl	384.95	Litre
0527	Synthetic under coat white and Grey.	2100.00	Imgl	461.94	Litre
0487	Synthetic white (Robbialac).	2850.00	Imgl	626.92	Litre
22326	Take 8 hooks of 5/8" dia. M.S rod 9" long. = 8 x 3/4' = 6 Rft. @ 1.043 lbs per Rft. = 6.26 lbs or 0.05 Cwt.	4,320.00	Cwt.	9515.42	kg
1946	Tape:	10.00	Rft.	32.80	Ru.m
2306	Tape: cotton.	15.00	Rft.	49.20	Ru.m
22311	Teak veneered board 1.2 mm thick	100.00	Sq.ft.	3532.00	Cum
22348	Tempering, polishing	100.00	Sft	1076.00	Sqm
22339	Termite proofing with labour	10.50	sft	10.50	sft
0005	Tetra-chloride.	140.00	Lbs.	308.37	Kg
22295	Thermopole Blue 1" thick 12 kg/M3 density.	20.00	Sft	215.20	Sqm
22296	Thermopole Blue 1" thick 15 kg/M3 density.	23.00	Sft	247.48	Sqm
22297	Thermopole Blue 1" thick 20 kg/M3 density.	26.00	Sft	279.76	Sqm
22298	Thermopole Blue 1" thick 25 kg/M3 density.	29.00	Sft	312.04	Sqm
22299	Thermopole Blue 1" thick 30 kg/M3 density.	32.00	Sft	344.32	Sqm
22300	Thermopole Blue 1" thick 35 kg/M3 density.	35.00	Sft	376.60	Sqm
22301	Thermopole Blue 1" thick 35 kg/M3 density.	35.00	Sft	376.60	Sqm
22302	Thermopole Blue 1-1/2" thick 12 kg/M3 density.	30.00	Sft	322.80	Sqm

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22303	Thermopole Blue 1-1/2" thick 15 kg/M3 density.	35.00	Sft	376.60	Sqm
22304	Thermopole Blue 1-1/2" thick 20 kg/M3 density.	39.00	Sft	419.64	Sqm
22305	Thermopole Blue 1-1/2" thick 25 kg/M3 density.	44.00	Sft	473.44	Sqm
22306	Thermopole Blue 1-1/2" thick 30 kg/M3 density.	48.00	Sft	516.48	Sqm
0948a	Thermopole false Ceiling tiles 2' x 2' x 3/4"	55.00	Sft	591.80	Sqm
0948	Thermopore sheet (3' x 2' = 915 mm x 610 mm) 1/2" = 13 mm thick.	40.00	Each	40.00	Each
0946	Thermopore sheet (3' x 2' = 915 mm x 610 mm) 1-1/2" = 38 mm thick.	100.00	Each	100.00	Each
0947	Thermopore sheet (3' x 2" = 915 mm x 610 mm) 1" = 25 mm thick..	65.00	Each	65.00	Each
0949	Thermosole sheet 1/2" = 13 mm thick.	4000.00	% Sft.	430.56	Sq.m
0950	Thermosole sheet, 1" = 25 mm thick.	6500.00	% Sft.	699.65	Sq.m
0985	Tin sheet.	203210.00	Ton	199145.80	Tonne
22307	Tinted Glass 6mm thick (Imported)	360.00	Sft	3873.60	Sq.m.
22308	Tinted Glass 6mm thick (Pakistani)	250.00	Sft	2690.00	Sq.m.
2060	Tower bolt Brass (anodized) size 12" (305 mm).	6960.00	Doz	6960.00	Doz
2061	Tower bolt Brass (anodized) size 9" (229 mm).	4800.00	Doz	4800.00	Doz
2062	Tower bolt Brass (c.p.) size 12" (305 mm).	7800.00	Doz	7800.00	Doz
2063	Tower bolt Brass (c.p.) size 9" (229 mm)...	6600.00	Doz	6600.00	Doz
0301	Tower Bolts aluminium 9" = 229 mm long.	4200.00	Doz	4200.00	Doz
0310	Tower Bolts (Iron) 12" = 305 mm long..	400.00	Each	400.00	Each
0314	Tower Bolts (Iron), 3" = 76 mm long.	540.00	Doz	540.00	Doz
0313	Tower Bolts (Iron), 4" = 102 mm long.	1020.00	Doz	1020.00	Doz
0311	Tower Bolts (Iron), 9" = 229 mm long.	2040.00	Doz	2040.00	Doz
0312	Tower Bolts (Iron). 6" = 152 mm long.	1500.00	Doz	1500.00	Doz
0300	Tower Bolts aluminium 12" = 305 mn long.	5400.00	Doz	5400.00	Doz
0304	Tower Bolts aluminium 3" = 76 mm long.	1500.00	Doz	1500.00	Doz
0303	Tower Bolts aluminium 4" = 102 mm long..	1800.00	Doz	1800.00	Doz
0302	Tower Bolts aluminium 6" = 152 mm long.	3000.00	Doz	3000.00	Doz
0305	Tower Bolts Brass (heavy) 12" = 305 mm long.	6600.00	Doz	6600.00	Doz
0309	Tower Bolts Brass (heavy) 3" = 76 mm long..	2021.00	Doz	2021.00	Doz
0308	Tower Bolts Brass (heavy) 4" = 102 mm long.	2234.00	Doz	2234.00	Doz
0307	Tower Bolts Brass (heavy) 6" = 152 mm long.	4768.00	Doz	4768.00	Doz
0306	Tower Bolts Brass (heavy) 9" = 229 mm, long.	5852.00	Doz	5852.00	Doz
0296	Tower Bolts Brass Brass oxidised 6" = 152 mm.	3600.00	Doz	3600.00	Doz
0299	Tower Bolts Brass Brass oxidised 8" = 203 mm..	6000.00	Doz	6000.00	Doz
0297	Tower Bolts Brass Brass oxidised 9" = 229 mm.	7500.00	Doz	7500.00	Doz
0298	Tower Bolts Brass, Brass oxidised, 12" = 305 mm..	9000.00	Doz	9000.00	Doz
0323	Tower Bolts Iron (c.p.) 12" = 305 mm.	2640.00	Doz	2640.00	Doz
0315	Tower Bolts Iron (oxidised copper finished) 12" = 305 mm long.	3600.00	Doz	3600.00	Doz
0318	Tower Bolts Iron (oxidised copper finished) 4" = 102 mm long.	1200.00	Doz	1200.00	Doz
0317	Tower Bolts Iron (oxidised copper finished) 6" = 152 mm long.	800.00	Doz	800.00	Doz
0316	Tower Bolts Iron (oxidised copper finished) 8" = 203 mm long.	2880.00	Doz	2880.00	Doz

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0295	Tower Bolts Iron oxidised 12" = 305 mm.	3240.00	Doz	3240.00	Doz
0327	Tower Bolts Iron oxidised 6" = 152 mm..	1500.00	Doz	1500.00	Doz
0294	Tower Bolts Iron oxidised 8" = 203 mm.	1950.00	Doz	1950.00	Doz
0324	Tower Botts Iron (c.p.) 9" = 229 mm.	1500.00	Doz	1500.00	Doz
R1150	Traffic signs Category - 1	13,300.00	No	13,300.00	No
R1152	Traffic signs Category - 2	16,200.00	No	16,200.00	No
R1151	Traffic signs Category - 3 (A,B,C)	19,225.00	P.Sqm	19,225.00	P.Sqm
0526	Tropical wall primer sealler, (alkali resisting)	2090.00	Imgl	459.74	Litre
0526b	Tuff Paver (50mm thick) C.C. 5000 psi	55.00	Sft	591.80	Sqm
0526a	Tuff Paver (50mm thick) C.C. 7000 psi	70.00	Sft	753.20	Sqm
0541b	Tuff Paver (60mm thick) C.C. 5000 psi	65.00	Sft	699.40	Sqm
0541a	Tuff Paver (60mm thick) C.C. 7000 psi	80.00	Sft	860.80	Sqm
0541d	Tuff Paver (80mm thick) C.C. 5000 psi	75.00	Sft	807.00	Sqm
0541c	Tuff Paver (80mm thick) C.C. 7000 psi	100.00	Sft	1076.00	Sqm
R1131	Tung Stone Curbide bits	352000.00	P.Set	352000.00	P.Set
0541	Turpentine.	1150.00	Imgl	252.97	Litre
0319	Two Bolts Iron (oxidised copper finished) 3" = 76 mm long.	1020.00	Doz	1020.00	Doz
0319a	Unglazed vitrified porcelain tiles (Polished) foreign make 40cmx40cm	280.00	Sft	3012.80	Sqm
R1169	Unglazed vitrified porcelain tiles (Polished) forigen make (Italian or equalent except China make). size 40 cm x 40 cm.	280.00	Sft	280.00	Sft
R1170	Unglazed vitrified porcelain tiles (Polished) forigen make (Italian or equalent except China make). size 60cm x 60 cm.	445.00	Sft	445.00	Sft
22354	Unglazed vitrified porcelain tiles (Polished) forigen make (Italian or equalent except China make). size 80cm x 80 cm.	665.00	Sft	665.00	Sft
2341a	Unglazed vitrified porcelain tiles (Polished) Pak make 40cm x 40cm	175.00	Sft	1883.00	Sqm
R1168	Unglazed vitrified porcelain tiles (Polished) Pak make. size 60 cm x 60 cm.	210.00	Sft	210.00	Sft
R1169	Unglazed vitrified porcelain tiles (Polished) Pak make. size 80 cm x 80 cm.	270.00	Sft	280.00	Sft
1020	uPVC Pressure Pipe of class 'D' 2 inch dia pipe.	125	Rft.	410.13	Mtr
22316	uPVC Pressure Pipe of class 'D' 3 inch dia pipe.	270.00	Rft.	885.87	Mtr
22317	uPVC Pressure Pipe of class 'D' 4 inch dia pipe.	450.00	Rft.	1476.45	Mtr
2341	Varnish paint..	3150.00	Imgl	692.92	Litre
2342	Varnish: copal..	2100.00	Imgl	461.94	Litre
2343	Varnish: synthetic, clear.	2575.00	Imgl	566.43	Litre
0867	Veneer board both sides burma teak veneer density 500 std quality 1" = 25 mm thick......	138.00	Sft	1484.88	Sqm
0864	Veneer board both sides burma teak veneer density 500 std quality 1/2" = 13 mm thick...	120.00	Sft	1291.20	Sqm
0866	Veneer board both sides burma teak veneer density 500 std quality 3/4" = 19 mm thick	132.00	Sft	1420.32	Sqm

BASIC RATES OF MATERIALS - 2022

Sub-Head Code-130

Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0865	Veneer board both sides burma teak veneer density 500 std quality 5/8" = 16 mm thick...	125.00	Sft	1345.00	Sqm
0863	Veneer board one side burma teak other local veneer density 500 std quality 1" = 25 mm thick.	112.00	Sft	1205.12	Sqm
0860	Veneer board one side burma teak other local veneer density 500 std quality 1/2" = 13 mm thick.	90.00	Sft	968.40	Sqm
0862	Veneer board one side burma teak other local veneer density 500 std quality 3/4" = 19 mm thick.	104.00	PSft.	1119.04	Sqm
0861	Veneer board one side burma teak other local veneer density 500 std quality 5/8" = 16 mm thick.	100.00	PSft.	1076.00	Sqm
0935	Veneered flush doors 38 mm thick burma teak veneered shutters density 400, 82" x 39" - 2.1 m x 1.0 m.	900.00	PSft.	9684.00	Sqm
0934	Veneered flush doors 38 mm thick burma teak veneered shutters density 400, 82" x 42" - 2.1 m x 1.1 m.	900.00	PSft.	9684.00	Sqm
1236a	Venetian grain wall coating 1.5mm to 3mm.	40.00	Sft	430.40	Sq.m.
0320	Ventilator catchers Brass 2" = 52 mm size..	960.00	Doz	960.00	Doz
0321	Ventilator pivots Brass 2-1/2" = 64 mm size..	1320.00	Doz	1320.00	Doz
0936	VIP all rounder matt finish (Robbialac).	3250.00	Imgl	714.91	Litre
0937	VIP plastic emulsion paint (Robbialac).	4900.00	Imgl	1077.87	Litre
0938	VIP weather coat (Robbialac)	4185.00	Imgl	920.59	Litre
1305	Wall paper washable 21" x 396" = 534 mm x 10 m - 58 Sft 5.36 SM one roll (No. 7992-02).	5200.00	Roll	5200.00	Roll
1303	Wall paper washable 21" x 396" = 534 mm x 10 m - 58 Sft 5.36 SM one roll.	5500.00	Roll	5500.00	Roll
1301	Wall paper washable 21" x 396" = 534 mm x 10 m - 58 Sft one roll (5.36 SM) (No. 175604).	5300.00	Roll	5300.00	Roll
1306	Wall paper washable 21" x 396" = 534 mm x 10 m - 58 Sq.ft. 5.36 one roll (No. 1054-11).	5300.00	Roll	5300.00	Roll
1302	Wall paper washable 21" x 396" = 534 mm x 10 m - 58 Sq.ft. one roll (5.36 SM) (No. 65041).	5500.00	Roll	5500.00	Roll
1304	Wall paper washable 21" x 396" = 534 mm x 10 m -58 Sft 5.36 SM one roll (No. 6041)	5000.00	Roll	5000.00	Roll
1319	Wall paper washable: 21" x 396" = 534 mm x W m - 58 Sft 5.36 one roll grant-2.	5000.00	Roll	5000.00	Roll
0480a	Wall putti (ICI).	1800.00	Gln	1800.00	Gln
1923	Wall ties 18" x 3/4" x 3/16" = 457 x 19 x 5 mm.	86.20	Lbs.	189.87	Kg.
2303	Washers: Galvanised flat circular, dia 7/8" = 22 mm.	576.00	Grs.	576.00	Grs.
2301	Washers: Limpet, G. Iron dia 7/8" = 22 mm 5/16" = 8 mm hole, 14 w.g.	432.00	Grs.	432.00	Grs.
2357	Washing soda.	50.00	Lbs.	110.13	Kg.
22309	Water proof sand paper.	60.00	Each	60.00	Each
0555	Wax.	500.00	Lbs.	1101.32	Kg.
1906	Welding charges.	1000.00	% Points	1000.00	% Points
1267	welding Joints.	30.00	Each	30.00	Each
22310	Welding rod	7.00	Each	7.00	Pkt
0110	Wet process block: moulding charges.	800.00	Hund.	800.00	Hund.

BASIC RATES OF MATERIALS - 2022

Sub-Head Code-130

Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
0102	Wetting agent.	2400.00	Imgl	527.94	Litre
0111g	white glazed tiles upto 144 Sq.inch size i/c wastage.	105.00	Sft	1129.80	Sq.m.
1219	white / coloured glazed tiles from 1.5 Sq.ft to 3 Sft size	158.00	Sft	1700.71	P.Sqm
0092	White cement (anwarzab) 40 kg bag.	32520.00	Ton	31997.36	Tonne
2391	White cement (anwarzab) 40 kg bag.	1626.00	Cwt.	1279.89	40kg.
0392	White cement (mapal leaf) 40 kg bag.	1626.00	Cwt.	1279.89	40kg.
0091	White cement (maple leaf) 40 kg bag.	32520.00	Ton	31869.60	Tonne
0554	White lead.	120.00	Lbs.	264.32	Kg.
0356	White washing 3 coats over 1 coat of priming.	1450.00	%Sft.	156.08	Sq.m.
0502	White Zinc paste stiff paint.	1940.00	Imgl	426.75	Litre
1951	Winder: .	220.00	Each	220.00	Each
2387	Window catch with dia 1/2" = 13 mm shoot.	1200.00	Doz	1200.00	Doz
22349	Window Roll up blinds i/c fixing	250.00	Sft	2690.00	Sq.m
0340	Window stay (casement) heavy Brass 12" = 305 mm long.	3300.00	Doz	3300.00	Doz
0347	Window stay (casement) heavy Iron 9" 230 mm long.	714.00	Doz	714.00	Doz
0343	Window stays (casement) heavy Brass (oxidized) 12" = 305 mm long.	4200.00	Doz	4200.00	Doz
0345	Window stays (casement) heavy Brass (oxidized) 6" = 152 mm long.	3120.00	Doz	3120.00	Doz
0344	Window stays (casement) heavy Brass (oxidized) 9" = 229 mm long.	3660.00	Doz	3660.00	Doz
0342	Window stays (casement) heavy Brass 8" = 203 mm long.	3480.00	Doz	3480.00	Doz
0341	Window stays (casement) heavy Brass 9" = 229 mm long	3840.00	Doz	3840.00	Doz
0346	Window stays (casement) heavy Iron 12" = 305 mm long.	1080.00	Doz	1080.00	Doz
1268	Wire brushes.	120.00	Each	120.00	Each
1291	Wire gauze Aluminium (14 mesh) 30 gauge (0.85 mm thick).	80.00	Sq.ft	860.80	Sq.m.
1320	Wire gauze Brass.	960.00	Sq.ft	10329.60	Sq.m.
1292	Wire gauze G.I. (12 mesh) 24 gauge (1.06 mm thick).	120.00	Sq.ft	1291.20	Sq.m.
1330	Wire gauze Iron.	35.00	Sq.ft	376.60	Sq.m.
1293	Wire gauze nylon (16 mesh).	45.00	Sq.ft	484.20	Sq.m.
2250	Wire gauze, Nylon..	45.00	Sq.ft	484.20	Sq.m.
1329	Wire nails..	90.72	Lbs.	199.82	Kg.
1296	Wire netting (hexagonal) 1"= 26 mm mesh 20 gauge (1.27 mm) thick.	40.00	Sq.ft	430.40	Sq.m.
1298	Wire netting (hexagonal) 1-1/2" = 38 mm mesh 18 gauge (1.4 mm) thick.	50.00	Sq.ft	538.00	Sq.m.
1297	Wire netting (hexagonal) 2" = 52 mm mesh 16 gauge (1.6 mm) thick.	55.00	Sq.ft	591.80	Sq.m.

BASIC RATES OF MATERIALS - 2022

Sub-Head Code-130

Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
1295	Wire netting (hexagonal) 3/4" = 19 mm mesh 22 gauge (1.2 mm) thick.	40.00	Sq.ft	430.40	Sq.m.
1310	Wire netting (hexagonal): 1/2" mesh 22 gauge (1.2 mm) thick.	50.00	Sq.ft	538.00	Sq.m.
1312	Wire netting (hexagonal): 1/4" mesh 22 gauge (1.2 mm) thick.	65.00	Sq.ft.	699.40	Sq.m.
2454	Wire: stay 1/16" to 1/2" = 1.6 to 13 mm 7 ply	10620.50	Cwt.	10453.25	50 Kg.
1289	Wire: stay 1-1/16" to 1/2" = 27 x 13 mm dia, 7ply.	10620.50	Cwt.	10453.25	50 Kg.
1271	Wood Deodar (pharas) 2nd quality.	6000.00	Cft	211920.00	Cu.m.
1270	Wood Deodar (phares) 1st quality.	7500.00	Cft	264900.00	Cu.m.
1269	Wood Deodar (sleeper).	8000.00	Cft.	282560.00	Cu.m.
1277	Wood pan scantling 2nd quality..	2500.00	Cft	88300.00	Cu.m.
1278	Wood pan scantling/planks.	3500.00	Cft	123620.00	Cu.m.
1276	Wood pan sleeper 1st quality.	3500.00	Cft	123620.00	Cu.m.
1273	Wood partal (phares).	2500.00	Cft	88300.00	Cu.m.
1274	Wood partal scantling/planks.	2800.00	Cft	98896.00	Cu.m.
1001	Wood ply 3 ply commercial 1/8" = 3 mm thick.	40.00	Sq.ft	430.40	Sq.m.
1000	Wood ply 3 ply commercial 5/32" thick = 4 mm.	50.00	Sq.ft	538.00	Sq.m.
0999	Wood ply 3 ply teak 5/32" = 4 mm.	80.00	Sq.ft	860.80	Sq.m.
2332	Wood ply commercial (3 ply) 4 mm..	50.00	Sq.ft	538.00	Sq.m.
2331	Wood ply commercial (5 ply).	65.00	Sq.ft	699.40	Sq.m.
1279	Wood sal.	4000.00	Cft	141280.00	Cu.m.
1280	Wood sheshum logs.	3500.00	Cft	123620.00	Cu.m.
1282	Wood sheshum scantling/planks (well seasoned).	4500.00	Cft	158940.00	Cu.m.
1281	Wood sheshum scantling/planks.	4000.00	Cft	141280.00	Cu.m.
1266	Wood soft (1/2" wide 2" deep = 13 x 52 mm).	45.00	Rft.	147.60	Ru.m
1284	Wood teak (best quality scantling/ptanks).	16500.00	Cft	582780.00	Cu.m.
1283	Wood teak (best quality sleeper).	15000.00	Cft	529800.00	Cu.m.
1286	Wood teak indigenous (best quality scantling/planks).	17600.00	Cft	621632.00	Cu.m.
1285	Wood teak indigenous (best quality sleeper).	17600.00	Cft	621632.00	Cu.m.
2327	Wood teak ply (3ply) 4 mm..	70.00	Sq.ft	753.20	Sq.m.
2326	Wood teak ply (5 ply).	100.00	Sq.ft	1076.00	Sq.m.
1272	Wood: Deodar Scantling Planks.	6000.00	Cft	211920.00	Cu.m.
R1182a	Wooden frame 2.5" x 1.25"	110.00	Rft	360.80	Ru.m.
2351	Wooden gutties of approved size.	12.00	Each	12.00	Each
2333	Woodply commercial (2 ply).	25.00	Sq.ft	269.00	Sq.m.
0548	Yellow oxide.	175.00	Lbs.	385.46	Kg.
1264	Z section 1" x 1-1/2" x 1/8" (25 x 38 x 3 mm) thick steel window/ventilator.	10227.00	Cwt.	201.31	P.kg
1238	Z section 1" x 1-1/4" x 1/8" (25 x 32 x 3 mm) thick steel window/ventilator.	10227.00	Cwt.	201.31	P.kg
0984	Zinc sheet.	123.00	Lbs.	270.93	Kg.
1237a	Zola coating 1.5mm to 3 mm thick	65.00	Sft	699.40	Sq.m.

BASIC RATES OF LABOUR AND HIRE CHARGES OF T/P

Code 131

RAKISRAN RUBLIC WORKS DERARRMENR

BASIC RARES OF LABOUR AND HIRE CHARGES OF R/R

Sub-Head Code-131

Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
R1032	Aggregate Spreader 4 M Wide	26000.00	P.day	26000.00	P.day
R1008	Asphalt Cutter	3300.00	P.day	3300.00	P.day
R1033	Asphalt Plant 120 T	170000.00	P.day	170000.00	P.day
R1036	Asphalt Plant 20 T	90000.00	P.day	90000.00	P.day
R1035	Asphalt Plant 40 T	115000.00	P.day	115000.00	P.day
R1034	Asphalt Plant 80 T	150000.00	P.day	150000.00	P.day
R1112	Asphalt Plant Engineer	2500.00	P.day	2500.00	P.day
R1077	Asphalt Recycling Machine	220000.00	P.day	220000.00	P.day
R1081	Assistant Sub-Engineer	1200.00	day	1200.00	day
R1090	Assistant Surveyor	1200.00	day	1200.00	day
9002	Bandhani (skilled beldar or heavy load lifter).	1100.00	day	1100.00	day
9003	Beldar.	950.00	day	950.00	day
9004	Bellow boy.	950.00	day	950.00	day
9007	Bhishti with donkey cart.	1200.00	day	1200.00	day
9005	Bhishti with mashak.	1050.00	day	1050.00	day
9006	Bhishti without mashak.	1000.00	day	1000.00	day
R1104	Bitumen Dist tow type 2000 liters	8000.00	P.day	8000.00	P.day
R1030	Bitumen Dist Tow Type 2000 LTR	8000.00	P.day	8000.00	P.day
9008	Bitumen layer.	1350.00	day	1350.00	day
9009	Bitumen mixer (manual).	1350.00	day	1350.00	day
9120	Bitumen mixer, hire charges.	10000.00	day	10000.00	day
9121	Bitumen plant of capacity 30 tons/hrs., hire charges including all components.	35000.00	day	35000.00	day
R1031	Bitumen Sprayer (Manual) 250 LTR	2000.00	P.day	2000.00	P.day
9010	Blacksmith with tools (first class).	1350.00	day	1350.00	day
9011	Blacksmith with tools (second class).	1300.00	day	1300.00	day
9012	Block machine driver.	1000.00	day	1000.00	day
9140	Block machine with operator, hire charges.	8000.00	day	8000.00	day
9141	Boring plant with fuel and labour, hire charges.	19000.00	day	19000.00	day
9101	Breaker.	950.00	day	950.00	day
9014	Buldozer operator.	1600.00	day	1600.00	day
9122	Buldozer with driver and fuel, hire charges.	32000.00	day	32000.00	day
R1050	Bull Dozer 120 HP	32000.00	P.day	32000.00	P.day
R1049	Bull Dozer 200 HP	50000.00	P.day	50000.00	P.day
R1051	Bull Dozer 90 HP	26000.00	P.day	26000.00	P.day
9013	Bullock cart driver with bullock cart.	5000.00	day	5000.00	day
9170	Cable jointer.	1350.00	day	1350.00	day
9016	Camel cart, driver with camel cart.	5000.00	day	5000.00	day
9018	Carpenter (first class).	1500.00	day	1500.00	day
9019	Carpenter (second class).	1350.00	day	1350.00	day
9020	Carpenter (Shuttering)	1350.00	day	1350.00	day
R1086	Carpenter (Shuttering)	1350.00	day	1350.00	day
9017	Carpenter (special for fixture and furniture),	2000.00	day	2000.00	day
R1005	Chipping spreader 3 Meter Wide	2000.00	P.day	2000.00	P.day
9021	Chowkidar.	950.00	day	950.00	day
9022	Clerk	20000.00	month	20000.00	month

BASIC RARES OF LABOUR AND HIRE CHARGES OF R/R

Sub-Head Code-131

Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
R1001	Cold Milling Machine 1 m Width	71000.00	P.day	71000.00	P.day
R1062	Combination Roller 10-12 T	23000.00	P.day	23000.00	P.day
R1093	Combination Roller 10-12 Ton	23000.00	P.day	23000.00	P.day
R1061	Combination Roller 18 T	28000.00	P.day	28000.00	P.day
R1097	Combination Roller 18 Ton	28000.00	P.day	28000.00	P.day
R1063	Combination Roller 8 T	19000.00	P.day	19000.00	P.day
R1039	Compressor 300 CFM	18000.00	P.day	18000.00	P.day
R1041	Concrete Batching Plant 30 CUM/T	39000.00	P.day	39000.00	P.day
9023	Concrete chiseller.	1050.00	day	1050.00	day
R1009	Concrete Cutter	3500.00	P.day	3500.00	P.day
9102	Concrete filler.	1050.00	day	1050.00	day
9026	Concrete lifter.	1050.00	day	1050.00	day
9025	Concrete mixer (manual).	1050.00	day	1050.00	day
9156	Concrete mixer (mech.), hire charges.	8000.00	day	8000.00	day
9104	Concrete mixer (showel man).	1050.00	day	1050.00	day
R1024	Concrete Pump	50000.00	P.day	50000.00	P.day
R1042	Concrete Static Mixer 1 CUY	7000.00	P.day	7000.00	P.day
R1043	Concrete Static Mixer 1/4 CUY	3500.00	P.day	3500.00	P.day
R1045	Concrete Static Mixer 4 CUM	42000.00	P.day	42000.00	P.day
R1044	Concrete Static Mixer 6 CUM	46000.00	P.day	46000.00	P.day
9175	Cook	1200.00	day	1200.00	day
9027	Coolie (boy or girl).	950.00	day	950.00	day
9028	Coolie (female).	950.00	day	950.00	day
R1048	Crane 20 T	25000.00	P.day	25000.00	P.day
R1047	Crane 45 T	30000.00	P.day	30000.00	P.day
9015	Crane man.	1500.00	day	1500.00	day
9142	Crane with fuel & driver (10 tons), hire charges.	28000.00	day	28000.00	day
9143	crane with fuel & driver (3 tons), hire charges.	20000.00	day	20000.00	day
9144	Cutting machine, hire hcarges.	2000.00	day	2000.00	day
R1018	Diesel Tanker	16000.00	P.day	16000.00	P.day
9029	Donkey cart driver with donkey cart.	3000.00	day	3000.00	day
9030	Donkey man with five donkeys.	5000.00	day	5000.00	day
9097	Driller (steel).	1000.00	day	1000.00	day
9098	Drilling machine for steel work.	2000.00	day	2000.00	day
9145	Drilling machine, hire chrages.	5000.00	day	5000.00	day
R1074	Dumper 10 T	16000.00	P.day	16000.00	P.day
R1073	Dumper 18 T	23000.00	P.day	23000.00	P.day
R1140	Electric charges commercial	26.06	P.KWH	26.06	P.KWH
R1076	Electric Generator 50 KVA	27000.00	P.day	27000.00	P.day
R1010	Electric Saw	5300.00	P.day	5300.00	P.day
9105	Engineer.	2500.00	day	2500.00	day
9050	Engraver.	1200.00	day	1200.00	day
9031a	Excavation	12.99	day	12.99	day
R1028	Excavator (Track Type) 100 HP	22000.00	P.day	22000.00	P.day
9031	Excavator.	950.00	day	950.00	day
9032	Farash.	950.00	day	950.00	day
9033	Fire man.	950.00	day	950.00	day
9034	Fitter.	1350.00	day	1350.00	day

BASIC RARES OF LABOUR AND HIRE CHARGES OF R/R

Sub-Head Code-131

Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
22351	Fixing charges	20.00	day	20.00	day
R1075	Flat Body Truck 8 T	13000.00	P.day	13000.00	P.day
9123	Floor grinder with machine, hire charges.	1600.00	day	1600.00	day
9035	Floor grinder.	1350.00	day	1350.00	day
9036	Floor polisher.	1000.00	day	1000.00	day
R1102	Foreman Asphalt	1350.00	day	1350.00	day
R1121	Foreman Concrete	1350.00	day	1350.00	day
R1087	Foreman Earthwork	1350.00	day	1350.00	day
R1023	Forgoing/Shape Machine	10500.00	P.day	10500.00	P.day
R1054	Front end Loader 1.50 Cum	30000.00	P.day	30000.00	P.day
R1053	Front end Loader 2.50 Cum	36000.00	P.day	36000.00	P.day
R1052	Front end Loader 3.00 Cum	45000.00	P.day	45000.00	P.day
9039	Furniture polisher (first class).	1500.00	day	1500.00	day
9040	Furniture polisher (second class).	1200.00	day	1200.00	day
9038	Furniture polisher (special).	1800.00	day	1800.00	day
9099	Gas plant for welding, hire charges.	2000.00	day	2000.00	day
a9035	General Foreman.	1350.00	day	1350.00	day
R1014	Generator (Diesel) 150 KVA	27000.00	P.day	27000.00	P.day
R1015	Generator (Diesel) 250 KVA	40500.00	P.day	40500.00	P.day
R1026	Girder Launcher	36000.00	P.day	36000.00	P.day
9041	Glazier.	1300.00	day	1300.00	day
R1056	Grader 140 HP	33000.00	P.day	33000.00	P.day
R1092	Grader 140 HP	33000.00	P.day	33000.00	P.day
R1055	Grader 165 HP	39000.00	P.day	39000.00	P.day
9042	Grill maker.	1300.00	day	1300.00	day
9146	Grout mixer.	3000.00	day	3000.00	day
9168	Guterman.	950.00	day	950.00	day
9043	Hammer man.	1050.00	day	1050.00	day
9044	Hand cart driver with cart.	1100.00	day	1100.00	day
9124	Hand roller (1/2 ton), hire charges.	3200.00	day	3200.00	day
9125	Harrowing disk with tractor, hire charges.	4000.00	day	4000.00	day
9045	Hedge cutter.	950.00	day	950.00	day
R1083	Helper	950.00	day	950.00	day
R1141	Highly skilled labour	1250.00	P.day	1250.00	P.day
4310	Hire charges of carriage one pair.	650.00	day	650.00	day
4311	Hire charges of tripco pulley.	1500.00	day	1500.00	day
9096	Hire charges, canvas belt.	950.00	day	950.00	day
9106	Hole driller.	1600.00	day	1600.00	day
9147	Hydraulic Jack.	1000.00	day	1000.00	day
9148	Injection pump, hire charges.	1500.00	day	1500.00	day
9126	Isopector/tyre roller (capacity 10 tons), hire charges.	25000.00	day	25000.00	day
R1019	Jack Hammer	2450.00	P.day	2450.00	P.day
9046	Khalasi.	1100.00	day	1100.00	day
R1084	Labour	950.00	day	950.00	day
0559c	Labour for lacquer polish	120	Sft	120	Sft
R1188	Labour for making & fixisng complete	350	Sft	350	Sft
9174	Labour for making steel window of any z section.	1075.00	Sq.ft.	998.68	Sq.m.

BASIC RARES OF LABOUR AND HIRE CHARGES OF R/R

Sub-Head Code-131

Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
9174a	Labour for making wardrobe	175.00	Sq.ft.	162.58	Sq.m.
9149	Lift, hire charges.	5000.00	day	5000.00	day
9047	Line man.	950.00	day	950.00	day
S-1191	Machanic for 3 shifts	1200.00	day	1200.00	day
9058	Machine fitter.	1100.00	day	1100.00	day
9048	Mali	950.00	day	950.00	day
9049	Marble chiseller.	1050.00	day	1050.00	day
9177	Masalchi	1000.00	day	1000.00	day
9052	Mason (first class for block, brick and concrete work).	1500.00	day	1500.00	day
9055	Mason (first class for stone work).	1400.00	day	1400.00	day
9053	Mason (second class for block, brick am concrete work).	1350.00	day	1350.00	day
9056	Mason (second class for stone work).	1300.00	day	1300.00	day
9054	Mason (special for ornamental stone work)	1600.00	day	1600.00	day
9051	Mason (special for ornamental work)	1600.00	day	1600.00	day
9057	Mate.	950.00	day	950.00	day
9059	Mistry.	1000.00	day	1000.00	day
9060	Mixer driver.	1100.00	day	1100.00	day
R1144	Mobilization of Piling Equipment (1.1 Mtr to 2.00 Mtr dia	140.00	P.Rft	140.00	P.Rft
R1143	Mobilization of Piling Equipment (up to 1 Mtr dia)	75.00	P.Rft	75.00	P.Rft
9062	Motor driver.	950.00	day	950.00	day
9157	Motor grader, 90 HP, hire charges.	24000.00	day	24000.00	day
R1072	Motor Scraper 400 HP	100000.00	P.day	100000.00	P.day
9150	Motor trailer with driver and fuel.	20000.00	day	20000.00	day
9061	Moulder with mould.	1100.00	day	1100.00	day
9107	Operator (for boring plant).	1500.00	day	1500.00	day
R1065	P.T.R (9-Wheeler) 18 T	19800.00	P.day	19800.00	P.day
R1064	P.T.R (9-Wheeler) 21 T	22000.00	P.day	22000.00	P.day
9063	Painter (first class).	1400.00	day	1400.00	day
9064	Painter (second class).	1100.00	day	1100.00	day
9065	Painter with spray machine.	1500.00	day	1500.00	day
R1038	Paver 2.5 M Wide	23500.00	P.day	23500.00	P.day
R1037	Paver 4 M Wide	30000.00	P.day	30000.00	P.day
R1022	Percussion Boring Rig	6500.00	P.day	6500.00	P.day
9127	Piling plant with accessories, fuel and operator, hire charges.	20000.00	day	20000.00	day
R1020	Piling RIG (Dia 1m to 2m)	70000.00	P.day	70000.00	P.day
R1079	Piling RIG (Dia UP to 1m)	40500.00	P.day	40500.00	P.day
9108	Pipe layer.	1100.00	day	1100.00	day
9067	Plasterer (first class).	1450.00	day	1450.00	day
9068	Plasterer (second class).	1100.00	day	1100.00	day
9066	Plasterer (special).	1600.00	day	1600.00	day
R1025	Plate Compactor	3200.00	P.day	3200.00	P.day
9069	Plumber (first class).	1350.00	day	1350.00	day
9070	Plumber (second class).	1100.00	day	1100.00	day
R1029	Power Broom	9000.00	P.day	9000.00	P.day

BASIC RARES OF LABOUR AND HIRE CHARGES OF R/R

Sub-Head Code-131

Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
9151	Pressure hand pump, hire chanrges.	1000.00	day	1000.00	day
R1109	PTR (9 - Wheeler) 18 Ton	19800.00	P.day	19800.00	P.day
R1004	Pugmill 40 tons per hours	33000.00	P.day	33000.00	P.day
R1003	Pump 4" Delivery (Diesel)	6000.00	P.day	6000.00	P.day
R1095	Pump 4" delivery (Diesel)	6000.00	P.day	6000.00	P.day
9166	Pump 5 HP including direct & indirect, hire charges.	2500.00	day	2500.00	day
9071	Pump driver.	1100.00	day	1100.00	day
9072	Pump man.	1000.00	day	1000.00	day
9128	Pump with driver and P.O.L, hire charges..	2500.00	day	2500.00	day
9162	Pumping set above 10 HP pumping out from 15 ft deep, hire charges with fuel.	6000.00	day	6000.00	day
9160	Pumping set above 10 HP pumping out water from 10 ft deep, hire charges with fuel.	6000.00	day	6000.00	day
9161	Pumping set above 10 HP pumping out water from 20 feet deep, hire charges with fuel.	7000.00	day	7000.00	day
9164	Pumping set upto 10 HP pumping out water from 10 ft deep. hire charges with fuel.	6000.00	day	6000.00	day
9165	Pumping set upto 10 HP pumping out water from 15 ft deep, hire charges with fuel.	6000.00	day	6000.00	day
9163	Pumping set upto 10 HP pumping out water from 20 ft deep, hire charges with fuel.	6000.00	day	6000.00	day
9152	Rivetting machine, hire charges.	1000.00	day	1000.00	day
R1002	Road marking Machine	5000.00	P.day	5000.00	P.day
R1078	Road Marking machine (TP)	8500.00	P.day	8500.00	P.day
9129	Road packer, hire charges.	24000.00	day	24000.00	day
9131	Road roller 10-12 ton capcity, hire chargers.	25000.00	day	25000.00	day
9130	Road roller 6 ton capacity, hire charges	20000.00	day	20000.00	day
9073	Road roller driver.	1500.00	day	1500.00	day
R1016	Rock Crushing & Screening (200 T/H)	78000.00	P.day	78000.00	P.day
9074	Rock cutter.	1500.00	day	1500.00	day
R1040	Rock Driller	3000.00	P.day	3000.00	P.day
9075	Rock driller.	1500.00	day	1500.00	day
R1006	Sand Blasting machine	11500.00	P.day	11500.00	P.day
9076	Saw-man (timber).	1500.00	day	1500.00	day
9109	Screen vibrator.	1500.00	day	1500.00	day
R1017	Secondary Crusher	21500.00	P.day	21500.00	P.day
9077	Sewer man.	1000.00	day	1000.00	day
9110	Skilled worker.	1200.00	day	1200.00	day
9153	Spray machine with painter (fuel etc.) charges.	3000.00	day	3000.00	day
9078	Spray man (bitumen, tar, etc.).	1100.00	day	1100.00	day
R1066	Static Tandem Roller 12 T	10500.00	P.day	10500.00	P.day
R1067	Static Tandem Roller 8 T	10000.00	P.day	10000.00	P.day
R1127	Static Tendem Roller 12 Ton	10500.00	P.day	10500.00	P.day
R1110	Static Tendem Roller 8 Ton	10000.00	P.day	10000.00	P.day
9079	Stone breaker.	1100.00	day	1100.00	day
9080	Stone chiseller or stone dresser.	1050.00	day	1050.00	day
9081	Stone engraver.	1000.00	day	1000.00	day

BASIC RARES OF LABOUR AND HIRE CHARGES OF R/R

Sub-Head Code-131

Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
R1007	Stressing Equipment	12500.00	P.day	12500.00	P.day
R1080	Sub-Engineer	2500.00	day	2500.00	day
R1082	Supervisor	1500.00	day	1500.00	day
9169	Supervisor or electrician.	1450.00	day	1450.00	day
R1089	Surveyor	1500.00	day	1500.00	day
9082	Sweeper.	950.00	day	950.00	day
9083	Sweepress.	950.00	day	950.00	day
9132	Sheep foot roller, with driver & fuel hir charges.	28000.00	day	28000.00	day
9084	Tailor.	2000.00	day	2000.00	day
R1060	Tandem Vibratory Roller 1.5 T	6000.00	P.day	6000.00	P.day
R1057	Tandem Vibratory Roller 10-12 T	25000.00	P.day	25000.00	P.day
R1059	Tandem Vibratory Roller 6 T	17000.00	P.day	17000.00	P.day
R1058	Tandem Vibratory Roller 8 T	22000.00	P.day	22000.00	P.day
9133	Tar boiler with spray, hire charges.	5500.00	day	5500.00	day
9111	Technician.	1500.00	day	1500.00	day
R1116	Tendem Vibratory Roller 10-12 Ton	25000.00	P.day	25000.00	P.day
9085	Thatcher.	1450.00	day	1450.00	day
9087	Tile layer (floor, walls & marble work).	1600.00	day	1600.00	day
9086	Tile layer (roof work).	1500.00	day	1500.00	day
9112	Tile layer.	1600.00	day	1600.00	day
9113	Tile maker.	1500.00	day	1500.00	day
R1069	Tractor 50 H.P	7000.00	P.day	7000.00	P.day
R1068	Tractor 80 H.P	13000.00	P.day	13000.00	P.day
9134	Tractor 98 HP, hire charges.	4000.00	day	4000.00	day
9088	Tractor driver..	1500.00	day	1500.00	day
R1012	Tractor Trolley	9000.00	P.day	9000.00	P.day
R1046	Trailer Low Bed 30 T	29000.00	P.day	29000.00	P.day
R1027	Tripod & Chain Pully (20 Ton)	1650.00	P.day	1650.00	P.day
R1011	Truck (3-Axle)	18000.00	P.day	18000.00	P.day
	Truck with Driver (Hire Charges with out fuel).	5000.00	day	5000.00	day
9089	Upholsterer (first class).	1600.00	day	1600.00	day
9090	Upholsterer (second class).	1450.00	day	1450.00	day
9154	Vibraotor (immersion), hire charges.	1800.00	day	1800.00	day
R1021	Vibrator (Pocker 1.5")	2350.00	P.day	2350.00	P.day
9135	Vibratory roller with driver & fuel (3 to 6 tons), hire charges.	5000.00	day	5000.00	day
9136	Water tanker 1000 gallon capacity, hire charges.	12000.00	day	12000.00	day
9176	Waiter	1050.00	day	1050.00	day
R1091	Water 1000 LTR	100.00	P.day	100.00	P.day
R1070	Water Tank Bowser Type 12000 LTR	16000.00	P.day	16000.00	P.day
R1071	Water Tank Bowser Type 4000 LTR (INCL. Tractor)	7800.00	P.day	7800.00	P.day
R1094	Water Tanker Tow Type 4000 litre i/c Tractor	7800.00	P.day	7800.00	P.day
9091	Welder (electric).	1500.00	day	1500.00	day
9092	Welder (gas).	1600.00	day	1600.00	day
9155	Welding machine, hire charges.	2000.00	day	2000.00	day
R1013	Welding Plant Electric	6000.00	P.day	6000.00	P.day
9114	White washer.	1100.00	day	1100.00	day

BASIC RARES OF LABOUR AND HIRE CHARGES OF R/R

Sub-Head Code-131

Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
9167	Wireman.	1100.00	day	1100.00	day
9094	Wood cutter.	1300.00	day	1300.00	day
9095	Work Munshi.	1300.00	day	1300.00	day

ALUMINIUM BASIC RATES

Sub-Head Code-132

Code	Description	Rate	Unit
AL001	**Silver anodized** or powder coated fixed windows partation Deluxe model box section 101.76mm x 44.50mm and **2mm** thick	620	P.Sft
AL002	**Bronz anodized or powder coated** aluminium fixed windows Partition deluxe model box section 101.76mm x 44.50mm and **2mm** thick	640	P.Sft
AL003	**Champagne anodized or powder coated** aluminium fixed windows Partition deluxe model box section 101.76mm x 44.50mm and **2mm** thick	655	P.Sft
AL004	**Silver anodized** aluminium fixed windows Partition deluxe model box section 101.76mm x 44.50mm and **1.6mm** thick	580	P.Sft
AL005	**Bronz anodized or Powder Coated** aluminium fixed windows Partition deluxe model box section 101.76mm x 44.50mm and **1.6mm** thick	600	P.Sft
AL006	**Champagne anodized or powder coated aluminium** fixed windows Partition deluxe model box section 101.76mm x 44.50mm and **1.6mm** thick	615	P.Sft
AL007	**Silver anodized or powder coated aluminium Fixed windows Partition,** Economy model box section 76.2mm x 38.1mm and **2mm** thick	520	P.Sft
AL008	**Silver anodized or powder coated aluminium Fixed windows Partition** Economy model box section 76.2mm x 38.1mm and **2mm** thick	540	P.Sft
AL009	**Bronz anodized or powder coated aluminium Fixed windows Partition** economy model box section 76.2mm x 38.1mm and **2mm** thick	560	P.Sft
AL010	**Champagne anodized or powder coated aluminium Fixed windows Partition** , Economy model box section 76.2mm x 38.1mm and **2mm** thick	1310	P.Sft
AL011	**Silver anodized** aluminium Sliding windows Executive model section dubble or single glazed 101mm x 37mm and **2mm** thick	1350	P.Sft
AL012	**Bronz anodized or Powder** Coated aluminium Sliding windows, Executive model section dubble or single glazed 101mm x 37mm and **2mm** thick	1370	P.Sft
AL013	**Champagne anodized or Powder Coated** aluminium Sliding windows, Executive model section dubble or single glazed 101mm x 37mm and **2mm** thick	1220	P.Sft
AL014	**Silver anodized or Powder Coated** aluminium Sliding windows, Executive model section dubble or single glazed 101mm x 37mm and **1.6mm** thick	1250	P.Sft

Sub-Head Code-132

Code	Description	Rate	Unit
AL015	**Bronz anodized or Powder Coated** aluminium Sliding windows, Executive model section dubble or single glazed 101mm x 37mm and **1.6mm** thick	1270	P.Sft
AL016	**Champagne anodized or Powder Coated** aluminium Sliding windows, Executive model section dubble or single glazed 101mm x 37mm and **1.6mm** thick	1280	P.Sft
AL017	**Silver anodized or Powder** coated aluminium Sliding windows, VIP model section dubble or single glazed 100mm x 34mm and **2mm** thick	1300	P.Sft
AL018	**Bronz anodized or Powder Coated** aluminium Sliding windows , VIP model section dubble or single glazed 100mm x 34mm and **2mm** thick	1330	P.Sft
AL019	**Champagne anodized or powder coated** aluminium Sliding windows, VIP model section dubble or single glazed 100mm x 34mm and **2mm** thick .	1190	P.Sft
AL020	**Silver anodized or powder coated** aluminium Sliding windows, VIP model section dubble or single glazed 100mm x 34mm and **1.6mm** thick	1210	P.Sft
AL021	**Bronz anodized or Powder Coated** aluminium Sliding windows , VIP model section dubble or single glazed 100mm x 34mm and **1.6mm** thick	1240	P.Sft
AL022	**Champagne anodized or powder coated** aluminium Sliding windows, VIP model section dubble or single glazed 100mm x 34mm and **1.6mm** thick	1350	P.Sft
AL023	**Silver anodized or powder coated aluminium Swing door,** Deluxe model section, 76.2mm x 38.1mm and **1.6mm** thick	1400	P.Sft
AL024	**Bronz anodized or Powder Coated aluminium Swing door** , Deluxe model section, 76.2mm x 38.1mm and **1.6mm** thick	1450	P.Sft
AL025	**Champagne anodized or powder coated aluminium Swing door**, Deluxe model section, 76.2mm x 38.1mm and **1.6mm** thick	1490	P.Sft
AL026	**Silver anodized or powder coated aluminium Swing door**, Deluxe model section, 101.6mm x 44.5mm and **1.6mm** thick	1540	P.Sft
AL027	**Bronz anodized or Powder Coated aluminium Swing door** , Deluxe model section, 101.6mm x 44.5mm and **1.6mm** thick	1590	P.Sft
AL028	**Champagne anodized or powder coated aluminium Swing door** , Deluxe model section, 101.6mm x 44.5mm and **1.6mm** thick	1415	P.Sft
AL029	**Silver anodized or powder coated aluminium Swing door** , Deluxe model section, 76.2mm x 38.1mm and **2mm** thick	1450	P.Sft

Sub-Head Code-132

Code	Description	Rate	Unit
AL030	**Bronz anodized or Powder Coated aluminium Swing door** , Deluxe model section, 76.2mm x 38.1mm and **2mm** thick	1480	P.Sft
AL031	**Champagne anodized or powder coated aluminium Swing door** , Deluxe model section, 76.2mm x 38.1mm and **2mm** thick	1580	P.Sft
AL032	**Silver anodized or powder coated aluminium Swing door** , Deluxe model section, 101.6mm x 44.5mm and **2mm** thick	1620	P.Sft
AL033	**Bronz anodized or powder coated aluminium Swing door,** deluxe model section, 101.6mm x 44.5mm and **2mm** thick	1650	P.Sft
AL034	**Champagne anodized or powder coated aluminium Swing door**, Deluxe model section, 101.6mm x 44.5mm and **2mm** thick	880	P.Sft
AL035	**Silver anodized or powder coated aluminium** Sliding windows, Prime model box section 101mm x 30mm and **1.6mm** thick	920	P.Sft
AL036	**Bronz anodized or powder coated** aluminium Sliding windows, prime model box section 101mm x 30mm and **1.6mm** thick	950	P.Sft
AL037	**Champagne anodized or powder coated** aluminium Sliding windows, Prime model box section 101mm x 30mm and **1.6mm** thick	980	P.Sft
AL038	**Silver anodized or powder coated** aluminium Sliding windows, Prime model box section 101mm x 30mm and **2mm** thick	1050	P.Sft
AL039	**Bronz anodized or powder coated aluminium** Sliding windows , prime model box section 101mm x 30mm and **2mm** thick.	1050	P.Sft
AL040	**Champagne anodized or powder coated aluminium Sliding** windows , Prime model box section 101mm x 30mm and **2mm** thick	860	P.Sft
AL041	**Silver anodized or powder coated aluminium** Sliding windows , Deluxe model box section 95mm x 30mm and **1.6mm** thick	900	P.Sft
AL042	**Bronz anodized or powder coated** aluminium Sliding windows, deluxe model box section 95mm x 30mm and **1.6mm** thick	930	P.Sft
AL043	**Champagne anodized or powder coated** aluminium Sliding windows, Deluxe model box section 95mm x 30mm and **1.6mm** thick	950	P.Sft
AL044	**Silver anodized or powder coated** aluminium Sliding windows, Deluxe model box section 95mm x 30mm and **2mm** thick	980	P.Sft

Sub-Head Code-132

Code	Description	Rate	Unit
AL045	**Bronz anodized or powder coated** aluminium Sliding windows, deluxe model box section 95mm x 30mm and **2mm** thick	1010	P.Sft
AL046	**Champagne anodized or powder coated aluminium Sliding windows,** Deluxe model box section 95mm x 30mm and **2mm** thick	1300	P.Sft
AL047	**Silver anodized or powder coated** aluminium Hinged door , Economy model section, 76.2mm x 30mm and **2mm** thick	1340	P.Sft
AL048	**Bronz anodized or Powder Coated** aluminium Hinged door , Economy model section, 76.2mm x 30mm and **2mm** thick	1370	P.Sft
AL049	**Champagne anodized or powder coated** aluminium Hinged door , Economy model section, 76.2mm x 30mm and **2mm** thick	1180	P.Sft
AL050	**Silver anodized or powder coated** aluminium Hinged door, Economy model section, 76.2mm x 30mm and **1.6mm** thick	1220	P.Sft
AL051	**Bronz anodized or Powder Coated** aluminium Hinged door , Economy model section, 76.2mm x 30mm and **1.6mm** thick	1250	P.Sft
AL052	**Champagne anodized or powder coated aluminium** Hinged door , Economy model section, 76.2mm x 30mm and **1.6mm** thick	1260	P.Sft
AL053	**Silver anodized** or powder coated aluminium Hinged door, Deluxe model section, 101.6mm x 30mm and **1.6mm** thick	1300	P.Sft
AL054	**Bronz anodized or Powder Coated** aluminium Hinged door , Deluxe model section, 101.6mm x 30mm and **1.6mm** thick	1330	P.Sft
AL055	**Champagne anodized or powder coated** aluminium Hinged door , Deluxe model section, 101.6mm x 30mm and **1.6mm** thick	1360	P.Sft
AL056	**Silver anodized or powder coated** aluminium Hinged door, Deluxe model section, 101.6mm x 30mm and **2mm** thick	1390	P.Sft
AL057	**Bronz anodized or Powder Coated** aluminium Hinged door , deluxe model section, 101.6mm x 30mm and **2mm** thick	1430	P.Sft
AL058	**Champagne anodized or powder coated** aluminium Hinged door, Deluxe model section, 101.6mm x 30mm and **2mm** thick	580	P.Sft
AL059	**Silver anodized or powder coated** aluminium Fixed windows Partition , Economy model box section 76.2mm x 38.1mm and **1.6mm** thick	620	P.Sft

Sub-Head Code-132

Code	Description	Rate	Unit
AL060	**Bronz anodized or Powder coated** aluminium Fixed windows Partition , Economy model box section 76.2mm x 38.1mm and **1.6mm** thick	650	P.Sft
AL061	**Champagne anodized or powder coated** aluminium Fixed windows Partition , Economy model box section 76.2mm x 38.1mm and **1.6mm** thick	1650	P.Sft

BASIC RATES OF MATERIAL WATER SUPPLY

Sub-Head Code-133

Code No.	Description of Material	FPS Rate (Rs.)	FPS Unit	SI Rate (Rs.)	SI Unit
4333	Branch	20.00	Each	20.00	Each
3647	Brass Bib cock dia 1/2 inch (15mm).	600.00	Each	600.00	Each
3648	Brass Bib cock dia 3/4 inch (20mm).	750.00	Each	750.00	Each
3689	Brass Ferrule :dia 1 inch (25mm).	2,000.00	Each	2,000.00	Each
3687	Brass Ferrule :dia 1/2 inch (15mm).	2,000.00	Each	2,000.00	Each
3688	Brass Ferrule :dia 3/4 inch (20mm).	300.00	Each	300.00	Each
3651	Brass Stop cock :dia 3/4 inch (20mm).	550.00	Each	550.00	Each
3650	Brass Stop cock dia 1/2 inch (15mm).	430.00	Each	430.00	Each
4316	C.C. Gully Trap : 6 inches x 6 inches x 4 inches (150mm x 150mm x 100mm).	500.00	Each	500.00	Each
4335	C.I. Cover & Frame : weight 1Cwt. (50.8 kg.).	11,684.00	Each	11,684.00	Each
4315	C.I. Cover : and Frame : 12" x 12" (305mm x 305mm) inside.	1,000.00	Each	1,000.00	Each
4331	C.I. Cover : weight ICwt. 1 Qtr (63.504kg.).	14,605.00	Each	14,605.00	Each
4045	C.I. Cover and Frame : 14 inches x 14 inches (356mm x 356mm,) wt, 0.5 Cwt. (25.4kg.).	5,842.00	Each	5,842.00	Each
4268	C.I. Cover and Frame : 18 inches (460mm) dia, wt : 1Cwt., 3 Qtr. (88.90 kg.).	20,447.00	Each	20,447.00	Each
4269	C.I. Cover and Frame : 24 inches (610mm) dia, wt, : 2Cwt., 2 Qtr. (127.0 kg.).	29,210.00	Each	29,210.00	Each
4270	C.I. Cover and Frame : 30 inches (765mm) dia, wt, : 3Cwt. (152.41 kg.).	35,054.00	Each	35,054.00	Each
4342	C.I. Cover and Frame : weight: 2Cwt. (101.6kg)	23,368.00	Each	23,368.00	Each
4334	C.I. Cover: weight 1Cwt. 3 Qtr (88,90 kg.).	20,447.00	Each	20,447.00	Each
4377	C.I. Fire hydrant band 3" dia (76 mm)	1,100.00	Each	1,100.00	Each
3398	C.I. Floor Trap : 6 inches x 2 inches (150mm x 51 mm) with C.I. Grating	560.00	Each	560.00	Each
3399	C.I. Floor Trap : 6 inches x 3 inches(150mm x 76mm) with C.I. Grating .	1,250.00	Each	1,250.00	Each
3400	C.I. Floor Trap : having 4 inches (100mm) dia inlet and 4 inches (100mm) dia outlet of self cleaning design with C.I. grating and vent arm.	1,200.00	Each	1,200.00	Each
3401	C.I. Floor Trap : having 4 inches (100mm) dia, inlet and 3 inches (100mm) dia outlet of self cleaning design with C.I. grating and vent arm.	1,200.00	Each	1,200.00	Each
4317	C.I. Grating : 6 inches x 6 inches (150mm x 150mm).	360.00	Each	360.00	Each
4319	C.I. Gully Trap : 6 inches x 6 inches x 4 inches (150mm x 150mm x 100mm).	1,500.00	Each	1,500.00	Each
4219	C.I. Sluice : Valve with tail pieces and bolts and nuts : 3 inches (80mm) dia...	6,300.00	Each	6,300.00	Each
4220	C.I. Sluice Valve : with bolts and nuts : 4 inches (100mm) dia.	8,120.00	Each	8,120.00	Each
4222	C.I. Sluice Valve : with bolts and nuts : 9 inches (230mm) dia.	19,460.00	Each	19,460.00	Each
4221	C.I. Sluice Valve : with bolts and nuts :6 inches (150mm) dia.	9,940.00	Each	9,940.00	Each

Sub-Head Code-133

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
4223	C.I. Sluice Valve : with tail pieces and bolts and nuts : 12 inches (300mm) dia.	25,900.00	Each	25,900.00	Each
4224	C.I. Sluice Valve : with tail pieces and bolts and nuts : 15 inches (380mm) dia.	40,446.00	Each	40,446.00	Each
4225	C.I. Sluice Valve : with tail pieces and bolts and nuts : 18 inches (450mm) dia .	66,080.00	Each	66,080.00	Each
4226	C.I. Sluice valve : with tail pieces and bolts and nuts : 21 inches (530mm) dia.	98,700.00	Each	98,700.00	Each
4227	C.I. Sluice valve : with tail pieces arbolts and nuts : 24 inches (600mm) dia.	124,460.00	Each	124,460.00	Each
3356	C.I. Thumble : 4 inches (100mm) dia,,.	1,200.00	Each	1,200.00	Each
3323	C.I. Trap : 4 inches (100mm) dia.	1,600.00	Each	1,600.00	Each
3345	C.I. Urinal Trap : with chromium plated outlet grating 2 inches (50mm) dia, (Pakistani).	1,600.00	Each	1,600.00	Each
3352	C.I. Urinal Trap with chromium plated outlet grating 3 inches (80mm) ; Pakistani).	2,600.00	Each	2,600.00	Each
4209	C.P. Bib cock 1/2 inch dia.	900.00	Each	900.00	Each
4146	C.P. Mixer for shower.	6,500.00	Each	6,500.00	Each
4234	C.P. Mixer Tap 1/2 inch dia for (single) basin.	2,200.00	Each	2,200.00	Each
4054	C.P. Mixer Tap 1/2 inch dia for sink.	2,200.00	Each	2,200.00	Each
4205	C.P. Mixer Tap 1/2 inch dia for wash basin..	2,200.00	Each	2,200.00	Each
4267	Cast Iron Foot Rest.(wt. 4.0 kg.)	920.00	Each	920.00	Each
3733	Cast Iron Frame with hinged cover 230mm to 150mm or 9 inches x 6 inches (inside clear opening) weight 6.4 kg. or 1/2 Qtr.	1,472.00	Each	1,472.00	Each
4332	Channal Main Branch.	900.00	Each	900.00	Each
3365	Chromium Plated Brass Bottle Trap with union 1-1/4 inches (32mm) dia Pakistani.With pipes	2,100.00	Each	2,100.00	Each
3341	Chromium Plated Brass Flush Pipe- Pakistani.	1,250.00	Each	1,250.00	Each
3395	Chromium Plated Brass Bottle Trap with union & pipe, 1-1/2 inches (40mm) dia.	2,100.00	Each	2,100.00	Each
3361	Chromium Plated Brass Chain with 1-1/4 inches (32mm) dia rubber plug Pakistani.	200.00	Each	200.00	Each
3376	Chromium Plated Brass Overflow Sluice for bath tub, 1-1/4 inches (32mm) dia Pakistani.	560.00	Each	560.00	Each
3359	Chromium Plated Brass Pillar Taps 1/2 Inches (15mm) dia (Pakistani).	450.00	Each	450.00	Each
3371	Chromium Plated Brass Pipe for Bottle Trap :1-1/4 inches (32mm) dia, Pakistan....	1,830.00	Each	1,830.00	Each
3657	Chromium Plated Brass Shower Rose, inlet and detachable lid, dia 4 Inches (100mm).	900.00	Each	900.00	Each
3657a	CP Mixer 1/2 inch dia (15mm) (Faisal/Master or equivelent) lever type	8,500.00	Each	8,500.00	Each
3405	Chromium Plated Brass Toilet Papar Holder.Standard size	1,000.00	Each	1,000.00	Each
3403	Chromium Plated Brass Towel Rail with brackets and screws, 30 inches x 3/4 inches (760mm x 20mm) dia.	1,600.00	Each	1,600.00	Each
3363	Chromium Plated Brass Waste 1-1/4 inches' (32mm) dia : Pakistani.	860.00	Each	860.00	Each

Sub-Head Code-133

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
3378	Chromium Plated Chain with rubber plug, 1-1/2 inches (40mm) dia.	190.00	Each	190.00	Each
3404	Chromium Plated Towel Rail with brackets and Screws, 24 inches x 3/4 inches (600mm x 20mm) dia.	1,400.00	Each	1,400.00	Each
3343	Chromium Plated Union for flush Pipe Pakistani.	970.00	Each	970.00	Each
3374	Chromium Plated Waste, 1-1/2 inches (40mm) dia, Pakistani.	750.00	Each	750.00	Each
3721	Cost Iron Frame with hinged cover 380mm to 230mm or 15 inches x 9 inches (inside clear opening) weight 12.7 kg. or OneQtr	2,921.00	Each	2,921.00	Each
3331	European Type Glazed Earthen ware Wash Down W.C. Pan-Pakistani.(non-coupled)	4,800.00	Each	4,800.00	Each
3331a	Glazed earthen ware two piece toilet commode i/c duale with plastic seat cover.	17,100.00	Each	17,100.00	Each
3331b	PVC thimble with ring	550.00	Each	550.00	Each
3331c	Glazed earthen ware one piece toilet commode i/c duale with plastic seat cover.	35,000.00	Each	35,000.00	Each
4376	Fire Hydrants Standard Pattern 3 inches (80mm) dia inlet and 2-1/2 inches (65mm) dia screw outlet.	1,890.00	Each	1,890.00	Each
3673	Full Way Gun Metal Valve having flanged ends and wheel, dia 2 inches (50mm).	6,955.20	Each	6,955.20	Each
3674	Full Way Gun Metal Valve having flanged ends and wheel, dia 2-1/2 inches (65mm).	14,378.00	Each	14,378.00	Each
3675	Full Way Gun Metal Valve having flanged ends and wheel, dia 3 inches (80mm).	23,709.00	Each	23,709.00	Each
3676	Full Way Gun Metal Valve having flanged ends and wheel, dia 4 inches (100mm).	43,925.00	Each	43,925.00	Each
3677	Full Way Gun Metal Valve having flanged ends and wheel, dia 6 inches (150mm).	9,030.00	Each	9,030.00	Each
3660	Full Way Gun Metal Valve having threads end wheels dia 1 Inch (25mm)	3,206.00	Each	3,206.00	Each
3658	Full Way Gun Metal Valve having threads end wheels dia 1/2 inch (15mm).	1,120.00	Each	1,120.00	Each
3662	Full Way Gun Metal Valve having threads end wheels dia 1-1/2 inches (40mm).	6,531.00	Each	6,531.00	Each
3661	Full Way Gun Metal Valve having threads end wheels dia 1-1/4 inches (32mm).	5,089.00	Each	5,089.00	Each
3663	Full Way Gun Metal Valve having threads end wheels dia 2 inches (50mm).	6,955.20	Each	6,955.20	Each
3664	Full Way Gun Metal Valve having threads end wheels dia 2-1/2 Inches (65mm).	7,908.60	Each	7,908.60	Each
3665	Full Way Gun Metal Valve having threads end wheels dia 3 Inches (80mm).	13,039.60	Each	13,039.60	Each
3666	Full Way Gun Metal Valve having threads end wheels dia 4 inches (100mm).	24,158.40	Each	24,158.40	Each
3667	Full Way Gun Metal Valve having threads end wheels dia 6 inches (150mm).	31,375.00	Each	31,375.00	Each
3669	Full Way Gun Metal Valves having threads end wheels dia 3/4 inches (20mm).	1,610.00	Each	1,610.00	Each

Sub-Head Code-133

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
3671	G.I. Pipes 1 inch (25mm) dia (medium grade).	210.00	Rft.	689.01	Ru.m
3478	G.I. Pipes 1/2 inch (15mm) dia (medium grade).	108.00	Rft.	354.35	Ru.m
3482	G.I. Pipes 1-1/2 inches (40mm) dia (medium grade).	318.00	Rft.	1,043.36	Ru.m
3481	G.I. Pipes 1-1/4 inches (32mm) dia (medium grade).	276.00	Rft.	905.56	Ru.m
3483	G.I. Pipes 2 inches (50mm) dia (medium grade).	446.00	Rft.	1,463.33	Ru.m
3484	G.I. Pipes 3 inches (80mm) dia (medium grade).	740.00	Rft.	2,427.94	Ru.m
3480	G.I. Pipes 3/4 inch (20mm) dia (medium grade).	140.00	Rft.	459.34	Ru.m
3485	G.I. Pipes 4 inches (100mm) dia (medium grade).	1,074.00	Rft.	3,523.79	Ru.m
3486	G.I. Pipes 5 inches (125mm) dia (medium grade).	1,460.00	Rft.	4,790.26	Ru.m
3487	G.I. Pipes 6 inches (150mm) dia (medium grade).	1,720.00	Rft.	5,643.32	Ru.m
4336	G.I. Wire Terminal Guards.	200.00	Each	200.00	Each
4019	Glass Shelf with guard rail of standard size 24 inches x 5 inches (610mm x 127mm).	360.00	Each	360.00	Each
3369	Glazed Earthen Ware Lavatory Basin 22 inches x 16 inches (559mm x 406mm) Pakistan.	4,600.00	Each	4,600.00	Each
3357	Glazed Earthen Ware Lavatory Basin 25 inches x 18 inches (635mm x 457mm) Pakistani.	5,000.00	Each	5,000.00	Each
3333	Glazed Earthen Ware low level flushing cistern 3 gallon (13.6 Litre) capacity Pakistani.	2,600.00	Each	2,600.00	Each
3324	Glazed Earthen Ware Trap, 4 inches (100mm) dia, Pakistani.	500.00	Each	500.00	Each
4480	Gun Metal Non-Return Valve with flanged end : dia 2-1/2 inches (65mm).	8,000.00	Each	8,000.00	Each
2688	Gun Mattel Non-Return Valve with flanged end :dia 3 inches (80mm).	13,300.00	Each	13,300.00	Each
1932	Gun Metal Non-fleturn Valve with male and female ends : dia 1 inch (25mm).	3,400.00	Each	3,400.00	Each
1204	Gun Metal Non-Return Va)ve with male and female dia 1/2 inch (15mm).	1,204.00	Each	1,204.00	Each
5894	Gun Metal Non-Return Valve with flanged end :dia 2 inches (50mm).	5,894.00	Each	5,894.00	Each
3976	Gun Metal Non-Return Valve with flanged end dia 4 inches (100mm)	24,500.00	Each	24,500.00	Each
4109	Gun Metal Non-Return Valve with male and female ends : dia 1-1/2 inches (40mm).	6,600.00	Each	6,600.00	Each
2660	Gun Metal Non-Return Valve with male and female ends : dia 1-1/4 inches(32mm).	5,200.00	Each	5,200.00	Each
1757	Gun Metal Non-Return Valve with male and female ends : dia 2 inches (50mm).	1,757.00	Each	1,757.00	Each
1638	Gun Metal Non-Return Valve with male and female ends : dia 3/4 inch (20mm).	1,638.00	Each	1,638.00	Each
4029	Labour for cutting fitting and fixing the sheets angle and flat iron.	762.00	Cwt.	750.00	50 kg.
4028	Labour for cutting, fixing and fitting M.S. sheets.	1,016.00	Cwt.	1,000.00	50 kg.
4336	Lavatory Basin of standard size 28"x21" (711 x533mm) white earthe warePakistani.	2,500.00	Each	2,500.00	Each
4046	Lead Putty white and red.	63.52	lbs.	140.00	Kg
3469	Lead Wool.	68.06	lbs.	150.00	Kg

Sub-Head Code-133

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
3406	Looking Mirror of Imported glass 5 mm thick and Chromium plated clamp and screws of 24"x18" size (610x457mm).	1,500.00	Each	1,500.00	Each
3474	Mild Steel Clamps for C.I. pipes and socket 2 inches (50mm) dia.	60.00	Each	60.00	Each
3473	Mild Steel Clamps for C.I. pipes and socket 3 inches (80mm) dia.	80.00	Each	80.00	Each
3472	Mild Steel Clamps for C.I. pipes and socket 4 inches (100mm) dia.	100.00	Each	100.00	Each
4048	Over Flow Pipe and specials, 1 inch (25mm) dia.	114.83	Rft.	376.76	Ru.m
4427	P.V.C waste flush pipe for low level cistern.	100.00	Each	100.00	Each
4431	P.V.C, Ball Valve, 1 inch (25.0mm) dia.	550.00	Each	550.00	Each
4433	P.V.C. Ball Valve, 1.1/2 inches (40mm) dia.	680.00	Each	680.00	Each
4429	P.V.C. Ball Valve, 1/2 inch (15mm) dia.	400.00	Each	400.00	Each
4432	P.V.C. Ball Valve, 1-1/4 Inches (32mm) dia.	630.00	Each	630.00	Each
4434	P.V.C. Ball Valve, 2 Inches (50mm) dia.	850.00	Each	850.00	Each
4430	P.V.C. Ball Valve, 3/4 inches (20mm) dia.	450.00	Each	450.00	Each
4218	Pig Lead.	45.00	Lb	99.21	Kg
3402	Plastic Connection with 2 brass nut 1/2 inch (15mm) dia.	220.00	Each	220.00	Each
4496	Plastic low level flushing cistern 13.6 litters capacity with internal fittings.	3,200.00	Each	3,200.00	Each
4301	R.C.C pipe Class C 18" dia	200.00	Rft	656.20	Ru.m
4297	R.C.C, pipe: class 'C' dia 8 inches (200 mm).	110.00	Rft	360.91	Ru.m
3508	R.C.C. cover 1:2:4, 2" (50 mm) thick with handle, 12" x 12" (305 mm x 305 mm)	450.00	Cft	15,894.00	Cum
4468	R.C.C. pipe: (class 'A') dia 12 inches(300 mm).	246.00	Rft.	807.13	Ru.m
4469	R.C.C. pipe: (class 'A') dia 15 inches (380 mm).	295.00	Rft.	967.90	Ru.m
4470	R.C.C. pipe: (class 'A') dia 18 inches (460 mm).	393.00	Rft.	1,289.43	Ru.m
4471	R.C.C. pipe: (class 'A') dia 24 inches (600 mm).	574.00	Rft.	1,883.29	Ru.m
4472	R.C.C. pipe: (class 'A') dia 27 inches (680 mm).	810.00	Rft.	2,657.61	Ru.m
4473	R.C.C. pipe: (class 'A') dia 30 inches (760 mm).	1,080.00	Rft.	3,543.48	Ru.m
4474	R.C.C. pipe: (class 'A') dia 33 inches (840 mm).	1,260.00	Rft.	4,134.06	Ru.m
4475	R.C.C. pipe: (class 'A') dia 36 inches (910 mm).	1,450.00	Rft.	4,757.45	Ru.m
4465	R.C.C. pipe: (class 'A') dia 4 inches (100 mm).	110.00	Rft.	360.91	Ru.m
4466	R.C.C. pipe: (class 'A') dia 6 inches (150 mm).	140.00	Rft.	459.34	Ru.m
4468	R.C.C. pipe: (class 'A') dia 9 inches (230 mm).	190.00	Rft.	623.39	Ru.m
4272	R.C.C. pipe: (class 'B') dia 4 inches (100 mm).	140.00	Rft.	459.34	Ru.m
4273	R.C.C. pipe: (class 'B') dia 6 inches (150 mm).	200.00	Rft.	656.20	Ru.m
4277	R.C.C. pipe: class 'B' dia 12 inches (300 mm).	270.00	Rft.	885.87	Ru.m
4278	R.C.C. pipe: class 'B' dia 15 inches (380 mm).	490.00	Rft.	1,607.69	Ru.m
4279	R.C.C. pipe: class 'B' dia 18 inches (460 mm).	647.00	Rft.	2,122.81	Ru.m
4280	R.C.C. pipe: class 'B' dia 21 inches (530 mm).	1,015.00	Rft.	3,330.22	Ru.m
4291	R.C.C. pipe: class 'B' dia 24 inches (600 mm).	1,120.00	Rft.	3,674.72	Ru.m
4293	R.C.C. pipe: class 'B' dia 30 inches (760 mm).	1,473.00	Rft.	4,832.91	Ru.m
4275	R.C.C. pipe: class 'B' dia 9 inches (230mm).	240.00	Rft.	787.44	Ru.m
4298	R.C.C. pipe: class 'C' dia 9 inches (230 mm).	305.00	Rft.	1,000.71	Ru.m
4299	R.C.C. pipe: class 'C' dia 12 inches (300 mm).	350.00	Rft.	1,148.35	Ru.m
4300	R.C.C. pipe: class 'C' dia 15 inches (380 mm).	520.00	Rft.	1,706.12	Ru.m

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Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
4300a	R.C.C. pipe: class 'C' dia 18 inches (460 mm).	710.00	Rft.	2,329.51	Ru.m
4295	R.C.C. pipe: class 'C' dia 4 inches (100 mm).	160.00	Rft.	524.96	Ru.m
4296	R.C.C. pipe: class 'C' dia 6 inches (150 mm).	220.00	Rft.	721.82	Ru.m
4050	Riverts 5/8 inch x 3/8 inch (16 mm x 9.5 mm)..	115.00	lbs.	253.46	Kg
3414	Rubber plug: for sink 1-1/2 inches (40 mm) dia.	45.00	Each	45.00	Each
4034	Rubber washer: 1/8 inch (3.2 mm) thick..	35.00	Each	35.00	Each
4047	Scour pipe & specials 1-1/2 inches (40 mm) dia.	168.47	Rft.	552.75	Ru.m
4384	Spun yarn mixed with maxphalt composition for jointing 24 inches (600 mm) dia pipe..	180.00	Each	180.00	Each
4394	Spun yarn mixed with maxphalt composition for jointing 36 inches (920 mm) dia pipe.	220.00	Each	220.00	Each
4363	Spun yarn mixed with maxphalt composition for jointing upto 10 inches (250 mm) dia pipe.	100.00	Each	100.00	Each
3470	Spun yarn.	70.00	lbs.	154.28	Kg
3321	Squatting type glazed earthenware W.C. pan, 18 inches (483 mm) clear opening (Pakistani).	2,800.00	Each	2,800.00	Each
3321a	squatting type earthern ware W.C. pan (Porta or equivelent)	8,450.00	Each	8,450.00	Each
4482	Stainless steel sink 33 inch x 18 inches (838mm x 457mm) Pakistan Made..	4,500.00	Each	4,500.00	Each
4481	Stainless steel sink 48 inches x 20 inches (1016 mm x 508 mm) Pakistani made..	6,000.00	Each	6,000.00	Each
3871	Standard type taps 1/2 inch (15mm) dia. Swan neck up with 1/2 inch (15mm) control.	680.00	Each	680.00	Each
4305	Transportation of pump..................	80.00	Mile	50.00	Km
4002	W.C. Pan in white vitreous China (Similar to Shank'Orrisa' Pak-made).	3,600.00	Each	3,600.00	Each
4150	White glazed earthenware pedestal (Pakistani make).	1,600.00	Each	1,600.00	Each
	FIBER CEMENT PRESSURE PIPES & FITTINGS.				
S-100	F.C Pressure Pipe : internal dia 3 inches (80mm) : Class B.	716.00	Rft.	2,349.20	Ru.m
S-101	F.C Comet Joints :internal dia 10 inches (250mm) : Class C.	1,156.00	Each	1,156.00	Each
S-102	F.C Comet Joints :internal dia 10 inches (250mm) : Class D.	1,620.00	Each	1,620.00	Each
S-103	F.C Comet Joints :internal dia 10 inches (250mm): Class B.	1,004.00	Each	1,004.00	Each
S-104	F.C Comet Joints :internal dia 12 inches (300mm) : Class D.	2,376.00	Each	2,376.00	Each
S-105	F.C Comet Joints :internal dia 12 inches (300mm): Class B.	1,332.00	Each	1,332.00	Each
S-106	F.C Comet Joints :internal dia 12 inches (300mm): Class C.	2,076.00	Each	2,076.00	Each
S-107	F.C Comet Joints :internal dia 14 inches (350mm) : Class B.	2,086.00	Each	2,086.00	Each
S-108	F.C Comet Joints :internal dia 14 inches (350mm) : Class C.	3,210.00	Each	3,210.00	Each

Sub-Head Code-133

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-109	F.C Comet Joints :internal dia 14 inches (350mm) : Class D.	4,328.00	Each	4,328.00	Each
S-110	F.C Comet Joints :internal dia 16 inches (400mm) : Class B.	2,746.00	Each	2,746.00	Each
S-111	F.C Comet Joints :internal dia 16 inches (400mm): Class C.	3,440.00	Each	3,440.00	Each
S-112	F.C Comet Joints :internal dia 16 inches (400mm): Class D.	5,528.00	Each	5,528.00	Each
S-113	F.C Comet Joints :internal dia 18 inches (450mm) : Class B.	2,930.00	Each	2,930.00	Each
S-114	F.C Comet Joints :internal dia 18 inches (450mm) : Class C.	4,346.00	Each	4,346.00	Each
S-115	F.C Comet Joints :internal dia 18 inches (450mm): Class D.	5,554.00	Each	5,554.00	Each
S-116	F.C Comet Joints :internal dia 20 inches (500mm) : Class B.	3,842.00	Each	3,842.00	Each
S-117	F.C Comet Joints :internal dia 20 inches (500mm) : Class C.	4,880.00	Each	4,880.00	Each
S-118	F.C Comet Joints :internal dia 20 inches (500mm): Class D.	6,976.00	Each	6,976.00	Each
S-119	F.C Comet Joints :internal dia 24 inches (600mm) : Class B.	5,818.00	Each	5,818.00	Each
S-120	F.C Comet Joints :internal dia 24 inches (600mm): Class C.	9,236.00	Each	9,236.00	Each
S-121	F.C Comet Joints :internal dia 24 inches (600mm): Class D.	12,032.00	Each	12,032.00	Each
S-122	F.C Comet Joints :internal dia 3 inches (80mm): Class B	224.00	Each	224.00	Each
S-123	F.C Comet Joints :internal dia 3 inches (80mm): Class C	224.00	Each	224.00	Each
S-124	F.C Comet Joints :internal dia 3 inches (80mm): Class D	224.00	Each	224.00	Each
S-125	F.C Comet Joints :internal dia 4 inches (100mm) : Class B.	354.00	Each	354.00	Each
S-126	F.C Comet Joints :internal dia 4 inches (100mm) : Class C.	372.00	Each	372.00	Each
S-127	F.C Comet Joints :internal dia 4 inches (100mm) : Class D.	410.00	Each	410.00	Each
S-128	F.C Comet Joints :internal dia 6 inches (150mm) : Class B.	438.00	Each	438.00	Each
S-129	F.C Comet Joints :internal dia 6 inches (150mm) : Class C.	628.00	Each	628.00	Each
S-130	F.C Comet Joints :internal dia 6 inches (150mm) : Class D.	732.00	Each	732.00	Each
S-131	F.C Comet Joints :internal dia 8 inches (200mm) : Class B.	658.00	Each	658.00	Each
S-132	F.C Comet Joints :internal dia 8 inches (200mm) : Class C.	788.00	Each	788.00	Each
S-133	F.C Comet Joints :internal dia 8 inches (200mm) : Class D.	1,188.00	Each	1,188.00	Each

Sub-Head Code-133

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-134	F.C Pressure Pipe : internal dia 10 inches (250mm) Class D.	1,808.07	Rft.	5,932.29	Ru.m
S-135	F.C Pressure Pipe : internal dia 10 inches (250mm): Class B.	1,075.33	Rft.	3,528.17	Ru.m
S-136	F.C Pressure Pipe : internal dia 10 inches (250mm): Class C.	1,254.56	Rft.	4,116.20	Ru.m
S-137	F.C Pressure Pipe : internal dia 12 inches (300mm) Class B.	1,426.46	Rft.	4,680.23	Ru.m
S-138	F.C Pressure Pipe : internal dia 12 inches (300mm): Class C.	1,762.35	Rft.	5,782.28	Ru.m
S-139	F.C Pressure Pipe : internal dia 12 inches (300mm): Class D.	2,652.37	Rft.	8,702.42	Ru.m
S-140	F.C Pressure Pipe : internal dia 14 inches (350mm): Class B.	1,788.57	Rft.	5,868.29	Ru.m
S-141	F.C Pressure Pipe : internal dia 14 inches (350mm): Class C.	2,647.49	Rft.	8,686.42	Ru.m
S-142	F.C Pressure Pipe : internal dia 14 inches (350mm): Class D.	3,892.91	Rft.	12,772.62	Ru.m
S-143	F.C Pressure Pipe : internal dia 3 inches (80mm) Class D .	218.85	Rft.	718.04	Ru.m
S-144	F.C Pressure Pipe : internal dia 3 inches (80mm): Class C.	218.85	Rft.	718.04	Ru.m
S-145	F.C Pressure Pipe : internal dia 4 inches (100mm) : Class B.	279.81	Rft.	918.04	Ru.m
S-146	F.C Pressure Pipe : internal dia 4 inches (100mm) : Class D.	359.66	Rft.	1,180.06	Ru.m
S-147	F.C Pressure Pipe : internal dia 4 inches (100mm) : ClassC.	312.12	Rft.	1,024.05	Ru.m
S-148	F.C Pressure Pipe : internal dia 6 inches (150mm) : Class B.	458.42	Rft.	1,504.07	Ru.m
S-149	F.C Pressure Pipe : internal dia 6 inches (150mm) : Class C.	549.25	Rft.	1,802.09	Ru.m
S-150	F.C Pressure Pipe : internal dia 6 inches (150mm) : Class D.	669.34	Rft.	2,196.11	Ru.m
S-151	F.C Pressure Pipe : internal dia 8 inches (200mm) : Class C.	897.33	Rft.	2,944.14	Ru.m
S-152	F.C Pressure Pipe : internal dia 8 inches (200mm) : Class B.	791.26	Rft.	2,596.13	Ru.m
S-153	F.C Pressure Pipe : internal dia 8 inches (200mm) : Class D.	1,210.06	Rft.	3,970.19	Ru.m
S-154	F.C Pressure Pipe :internal dia 16 inches (400mm) : Class B.	22,878.90	Rft.	75,065.66	Ru.m
S-155	F.C Pressure Pipe :internal dia 16 inches (400mm): Class C.	3,457.65	Rft.	11,344.55	Ru.m
S-156	F.C Pressure Pipe :internal dia 16 inches (400mm): Class D.	5,059.68	Rft.	16,600.81	Ru.m
S-157	F.C Pressure Pipe :internal dia 18 inches (450mm) : Class B.	2,901.09	Rft.	9,518.46	Ru.m
S-158	F.C Pressure Pipe :internal dia 18 inches (450mm): Class C.	4,241.60	Rft.	13,916.68	Ru.m

Sub-Head Code-133

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-159	F.C Pressure Pipe :internal dia 18 inches (450mm): Class D.	6,186.22	Rft.	20,296.99	Ru.m
S-160	F.C Pressure Pipe :internal dia 20 inches (500mm) : Class C.	5,081.63	Rft.	16,672.81	Ru.m
S-161	F.C Pressure Pipe :internal dia 20 inches (500mm): Class B.	3,564.94	Rft.	11,696.57	Ru.m
S-162	F.C Pressure Pipe :internal dia 20 inches (500mm): Class D.	7,543.80	Rft.	24,751.21	Ru.m
S-163	F.C Pressure Pipe :internal dia 24 inches (600mm): Class C.	6,963.46	Rft.	22,847.11	Ru.m
S-164	F.C Pressure Pipe :internal dia 24 inches (600mm): Class D.	10,636.30	Rft.	34,897.70	Ru.m
S-165	F.C Pressure Pipe: internal dia 24 inches (600mm): Class B.	4,886.55	Rft.	16,032.78	Ru.m
S-166	Rubber Rings for F.C Pressure Pipe : internal dia 10 inches (250mm) : Class B	442.00	Each	442.00	Each
S-167	Rubber Rings for F.C Pressure Pipe : internal dia 10 inches (250mm) : Class D	478.00	Each	478.00	Each
S-168	Rubber Rings for F.C Pressure Pipe : internal dia 10 inches (250mm): Class C	454.00	Each	454.00	Each
S-169	Rubber Rings for F.C Pressure Pipe : internal dia 12 inches (300mm) : Class D	584.00	Each	584.00	Each
S-170	Rubber Rings for F.C Pressure Pipe : internal dia 12 inches (300mm): Class B	536.00	Each	536.00	Each
S-171	Rubber Rings for F.C Pressure Pipe : internal dia 12 inches (300mm): class C	546.00	Each	546.00	Each
S-172	Rubber Rings for F.C Pressure Pipe : internal dia 14 inches (350mm) : Class B	942.00	Each	942.00	Each
S-173	Rubber Rings for F.C Pressure Pipe : internal dia 14 inches (350mm) : Class C	968.00	Each	968.00	Each
S-174	Rubber Rings for F.C Pressure Pipe : internal dia 14 inches (350mm) : Class D	1,006.00	Each	1,006.00	Each
S-175	Rubber Rings for F.C Pressure Pipe : internal dia 16 inches (400mm) : Class B	986.00	Each	986.00	Each
S-176	Rubber Rings for F.C Pressure Pipe : internal dia 16 inches (400mm): Class C.	1,010.00	Each	1,010.00	Each
S-177	Rubber Rings for F.C Pressure Pipe : internal dia 16 inches (400mm): Class D	1,044.00	Each	1,044.00	Each
S-178	Rubber Rings for F.C Pressure Pipe : internal dia 18 inches (450mm): Class B.	1,102.00	Each	1,102.00	Each
S-179	Rubber Rings for F.C Pressure Pipe : internal dia 18 inches (450mm): Class C,	738.00	Each	738.00	Each
S-180	Rubber Rings for F.C Pressure Pipe : internal dia 18 inches (450mm): Class D	1,142.00	Each	1,142.00	Each
S-181	Rubber Rings for F.C Pressure Pipe : internal dia 20 inches (500mm): Class B.	1,216.00	Each	1,216.00	Each
S-182	Rubber Rings for F.C Pressure Pipe : internal dia 20 inches (510mm): Class C.	1,224.00	Each	1,224.00	Each
S-183	Rubber Rings for F.C Pressure Pipe : internal dia 20 inches (510mm): Class D	1,292.00	Each	1,292.00	Each

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-184	Rubber Rings for F.C Pressure Pipe : internal dia 24 inches (610mm) : Class B.	1,774.00	Each	1,774.00	Each
S-185	Rubber Rings for F.C Pressure Pipe : internal dia 24 inches (610mm): Class C.	2,076.00	Each	2,076.00	Each
S-186	Rubber Rings for F.C Pressure Pipe : internal dia 24 inches (610mm): Class D.	3,512.00	Each	3,512.00	Each
S-187	Rubber Rings for F.C Pressure Pipe : internal dia 3 inches (80mm): Class B	130.00	Each	130.00	Each
S-188	Rubber Rings for F.C Pressure Pipe : internal dia 3 inches (80mm): Class C.	130.00	Each	130.00	Each
S-189	Rubber Rings for F.C Pressure Pipe : internal dia 4 inches (100mm): Class D	230.00	Each	230.00	Each
S-190	Rubber Rings for F.C Pressure Pipe : internal dia 6 inches (150mm): Class B	290.00	Each	290.00	Each
S-191	Rubber Rings for F.C Pressure Pipe : internal dia 6 inches (150mm): Class C	300.00	Each	300.00	Each
S-192	Rubber Rings for F.C Pressure Pipe : internal dia 6 inches (150mm): Class D	314.00	Each	314.00	Each
S-193	Rubber Rings for F.C Pressure Pipe : internal dia 8 inches (200mm) : Class B	364.00	Each	364.00	Each
S-194	Rubber Rings for F.C Pressure Pipe : internal dia 8 inches (200mm): Class C	364.00	Each	364.00	Each
S-195	Rubber Rings for F.C Pressure Pipe : internal dia 8 inches (200mm): Class D	388.00	Each	388.00	Each
S-196	Rubber Rings for F.C Pressure Pipe : internal dia 4 inches (100mm) : Class B	216.00	Each	216.00	Each
S-197	Rubber Rings for F.C Pressure Pipe : internal dia3 inch (80mm); Class D.	216.00	Each	216.00	Each
S-198	Rubber Rings for F.C Pressure Pipe: internal dia 4 inches (100mm): Class C	216.00	Each	216.00	Each
	FIBER CEMENT SEWERAGE PIPES & FITTINGS				
S-199	Comet Joint for F.C. sewerage Pipe 10" i/d (250 mm)	750.00	Each	750.00	Each
S-200	Comet Joint for F.C. sewerage Pipe 12" i/d (300 mm)	1,094.00	Each	1,094.00	Each
S-201	Comet Joint for F.C. sewerage Pipe 14" i/d (350 mm)	1,682.00	Each	1,682.00	Each
S-202	Comet Joint for F.C. sewerage Pipe 16" i/d (400 mm)	2,066.00	Each	2,066.00	Each
S-203	Comet Joint for F.C. sewerage Pipe 18" i/d (450 mm)	2,290.00	Each	2,290.00	Each
S-204	Comet Joint for F.C. sewerage Pipe 20" i/d (500 mm)	2,898.00	Each	2,898.00	Each
S-205	Comet Joint for F.C. sewerage Pipe 24" i/d (600 mm)	4,072.00	Each	4,072.00	Each
S-206	Comet Joint for F.C. sewerage Pipe 3" i/d (80 mm)	220.00	Each	220.00	Each
S-207	Comet Joint for F.C. sewerage Pipe 4" i/d (100 mm)	244.00	Each	244.00	Each

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-208	Comet Joint for F.C. sewerage Pipe 6" i/d (150 mm)	336.00	Each	336.00	Each
S-209	Comet Joint for F.C. sewerage Pipe 8" i/d (200 mm)	528.00	Each	528.00	Each
S-210	F.C Sewerage Pipe 10" internal dia (250 mm).	287.12	Rft.	942.05	Ru.m
S-211	F.C Sewerage Pipe 12" internal dia (300 mm).	310.00	Rft.	1,017.11	Ru.m
S-212	F.C Sewerage Pipe 14" internal dia (350 mm).	350.00	Rft.	1,148.35	Ru.m
S-213	F.C Sewerage Pipe 16" internal dia (400 mm).	415.00	Rft.	1,361.62	Ru.m
S-214	F.C Sewerage Pipe 18" internal dia (450 mm).	505.00	Rft.	1,656.91	Ru.m
S-215	F.C Sewerage Pipe 20" internal dia (500 mm).	640.00	Rft.	2,099.84	Ru.m
S-216	F.C Sewerage Pipe 24" internal dia (600 mm).	820.00	Rft.	2,690.42	Ru.m
S-217	F.C Sewerage Pipe 3" internal dia (80 mm).	190.00	Rft.	623.39	Ru.m
S-218	F.C Sewerage Pipe 4" internal dia (100 mm).	210.00	Rft.	689.01	Ru.m
S-219	F.C Sewerage Pipe 6" internal dia (150 mm).	240.00	Rft.	787.44	Ru.m
S-220	F.C Sewerage Pipe 8" internal dia (200 mm).	290.00	Rft.	951.49	Ru.m
S-221	Rubber Ring for F.C. Sewer pipe 10" dia (250 mm)	442.00	Each	442.00	Each
S-222	Rubber Ring for F.C. Sewer pipe 12" dia (300 mm)	528.00	Each	528.00	Each
S-223	Rubber Ring for F.C. Sewer pipe 14" dia (350 mm)	932.00	Each	932.00	Each
S-224	Rubber Ring for F.C. Sewer pipe 16" dia (400 mm)	974.00	Each	974.00	Each
S-225	Rubber Ring for F.C. Sewer pipe 18" dia (450 mm)	1,054.00	Each	1,054.00	Each
S-226	Rubber Ring for F.C. Sewer pipe 20" dia (500 mm)	1,136.00	Each	1,136.00	Each
S-227	Rubber Ring for F.C. Sewer pipe 24" dia (600 mm)	1,764.00	Each	1,764.00	Each
S-228	Rubber Ring for F.C. Sewer pipe 3" dia (80 mm)	216.00	Each	216.00	Each
S-229	Rubber Ring for F.C. Sewer pipe 4" dia (100 mm)	216.00	Each	216.00	Each
S-230	Rubber Ring for F.C. Sewer pipe 6" dia (150 mm)	290.00	Each	290.00	Each
S-231	Rubber Ring for F.C. Sewer pipe 8" dia (200 mm)	356.00	Each	356.00	Each
	G.I. FITTINGS				
S-232	GI Over Cross 1/2" dia. (China).	221.00	Each	221.00	Each
S-233	GI B.Nipple 1/2" dia. (China).	51.00	Each	51.00	Each
S-234	GI B.Nipple 1" dia. (China).	143.00	Each	143.00	Each
S-235	GI B.Nipple 1-1/2" dia. (China).	242.00	Each	242.00	Each
S-236	GI B.Nipple 1-1/4" dia. (China).	172.00	Each	172.00	Each
S-237	GI B.Nipple 2" dia. (China).	362.00	Each	362.00	Each
S-238	GI B.Nipple 2-1/2" dia. (China).	577.00	Each	577.00	Each
S-239	GI B.Nipple 3" dia. (China).	106.00	Each	106.00	Each
S-240	GI B.Nipple 3/4" dia. (China).	35.00	Each	35.00	Each
S-241	GI B.Nipple 4" dia. (China).	1,502.00	Each	1,502.00	Each
S-242	GI B.Nipple 6" dia. (China).	5,173.00	Each	5,173.00	Each
S-243	GI bend 1" dia. (China).	429.00	Each	429.00	Each
S-244	GI bend 1/2" dia. (China).	127.00	Each	127.00	Each
S-245	GI bend 1-1/2" dia. (China).	693.00	Each	693.00	Each

Sub-Head Code-133

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-246	GI bend 2" dia. (China).	1,131.00	Each	1,131.00	Each
S-247	GI bend 2-1/2" dia. (China).	2,186.00	Each	2,186.00	Each
S-248	GI bend 3" dia. (China).	3,052.00	Each	3,052.00	Each
S-249	GI bend 3/4" dia. (China).	175.00	Each	175.00	Each
S-250	GI bend 4" dia. (China).	5,600.00	Each	5,600.00	Each
S-251	GI bend 6" dia. (China).	21,230.00	Each	21,230.00	Each
S-252	GI Cross 1/2" dia. (China).	176.00	Each	176.00	Each
S-253	GI Cross 1" dia. (China).	435.00	Each	435.00	Each
S-254	GI Cross 1-1/2" dia. (China).	922.00	Each	922.00	Each
S-255	GI Cross 1-1/4" dia. (China).	687.00	Each	687.00	Each
S-256	GI Cross 2" dia. (China).	1,131.00	Each	1,131.00	Each
S-257	GI Cross 3/4" dia. (China).	264.00	Each	264.00	Each
S-258	GI Elbow 1/2" dia. (China).	58.00	Each	58.00	Each
S-259	GI Elbow 1" dia. (China).	196.00	Each	196.00	Each
S-260	GI Elbow 1-1/2" dia. (China).	311.00	Each	311.00	Each
S-261	GI Elbow 1-1/4" dia. (China).	238.00	Each	238.00	Each
S-262	GI Elbow 2" dia. (China).	528.00	Each	528.00	Each
S-263	GI Elbow 2-1/2" dia. (China).	948.00	Each	948.00	Each
S-264	GI Elbow 3" dia. (China).	1,762.00	Each	1,762.00	Each
S-265	GI Elbow 3/4" dia. (China).	90.00	Each	90.00	Each
S-266	GI Elbow 4" dia. (China).	2,781.00	Each	2,781.00	Each
S-267	GI Elbow 6" dia. (China).	9,167.00	Each	9,167.00	Each
S-268	GI elbow M/F 1" dia. (China).	185.00	Each	185.00	Each
S-269	GI elbow M/F 1/2" dia. (China).	75.00	Each	75.00	Each
S-270	GI elbow M/F 3/4" dia. (China).	105.00	Each	105.00	Each
S-271	GI Over Cross 1" dia. (China).	253.00	Each	253.00	Each
S-272	GI Over Cross 3/4" dia. (China).	189.00	Each	189.00	Each
S-273	GI reducer bush 1" x 1-1/4" dia (China).	172.00	Each	172.00	Each
S-274	GI reducer bush 1/2" x 3/4" dia (China).	50.00	Each	50.00	Each
S-275	GI reducer bush 1-1/2" x 2" dia (China).	256.00	Each	256.00	Each
S-276	GI reducer bush 1-1/4" x 1-1/2" dia (China).	80.00	Each	80.00	Each
S-277	GI reducer bush 2" x 2-1/2" dia (China).	455.00	Each	455.00	Each
S-278	GI reducer bush 2-1/2" x 3" dia (China).	1,867.00	Each	1,867.00	Each
S-279	GI reducer bush 3" x 4" dia (China).	3,084.00	Each	3,084.00	Each
S-280	GI reducer bush 3/4" x 1" dia (China).	96.00	Each	96.00	Each
S-281	GI Reducing Elbow 1/2" x 3/4" dia (China).	101.00	Each	101.00	Each
S-282	GI Reducing Elbow 1-1/2" x 2" dia (China).	535.00	Each	535.00	Each
S-283	GI Reducing Elbow 1-1/4" x 1-1/2" dia (China).	3,591.00	Each	3,591.00	Each
S-284	GI Reducing Elbow 2" x 2-1/2" dia (China).	540.00	Each	540.00	Each
S-285	GI Reducing Elbow 2-1/2" x 3" dia (China).	1,893.00	Each	1,893.00	Each
S-286	GI Reducing Elbow 3" x 4" dia (China).	2,782.00	Each	2,782.00	Each
S-287	GI Reducing Elbow 3/4" x 1" dia (China).	273.00	Each	273.00	Each
S-288	GI Reducing Socket 1" x 1-1/4" dia (China).	202.00	Each	202.00	Each
S-289	GI Reducing Socket 1/2" x 3/4" dia (China).	84.00	Each	84.00	Each
S-290	GI Reducing Socket 1-1/2" x 2" dia (China).	535.00	Each	535.00	Each
S-291	GI Reducing Socket 1-1/4" x 1-1/2" dia (China).	359.00	Each	359.00	Each
S-292	GI Reducing Socket 2" x 2-1/2" dia (China).	1,894.00	Each	1,894.00	Each
S-293	GI Reducing Socket 2-1/2" x 3" dia (China).	1,894.00	Each	1,894.00	Each
S-294	GI Reducing Socket 3" x 4" dia (China).	2,782.00	Each	2,782.00	Each

Sub-Head Code-133

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-295	GI Reducing Socket 3/4" x 1" dia (China).	369.00	Each	369.00	Each
S-296	GI Reducing Tee 1" x 1-1/4" dia (China).	369.00	Each	369.00	Each
S-297	GI Reducing Tee 1/2" x 3/4" dia (China).	139.00	Each	139.00	Each
S-298	GI Reducing Tee 1-1/2" x 2" dia (China).	701.00	Each	701.00	Each
S-299	GI Reducing Tee 1-1/4" x 1-1/2" dia (China).	491.00	Each	491.00	Each
S-300	GI Reducing Tee 2" x 2-1/2" dia (China).	2,641.00	Each	2,641.00	Each
S-301	GI Reducing Tee 2-1/2" x 3" dia (China).	2,641.00	Each	2,641.00	Each
S-302	GI Reducing Tee 3" x 4" dia (China).	3,780.00	Each	3,780.00	Each
S-303	GI Reducing Tee 3/4" x 1" dia (China).	243.00	Each	243.00	Each
S-304	GI Socket 1/2" dia. (China).	91.00	Each	91.00	Each
S-305	GI Socket 1" dia. (China).	293.00	Each	293.00	Each
S-306	GI Socket 1-1/2" dia. (China).	416.00	Each	416.00	Each
S-307	GI Socket 1-1/4" dia. (China).	354.00	Each	354,00	Each
S-308	GI Socket 2" dia. (China).	659.00	Each	659.00	Each
S-309	GI Socket 2-1/2" dia. (China).	1,271.00	Each	1,271.00	Each
S-310	GI Socket 3" dia. (China).	2,111.00	Each	2,111.00	Each
S-311	GI Socket 3/4" dia. (China).	135.00	Each	135.00	Each
S-312	GI Socket 4" dia. (China).	2,894.00	Each	2,894.00	Each
S-313	GI Socket 6" dia. (China).	8,564.00	Each	8,564.00	Each
S-314	GI Tee 1/2" dia. (China).	136.00	Each	136.00	Each
S-315	GI Tee 1" dia. (China).	487.00	Each	487.00	Each
S-316	GI Tee 1-1/2" dia. (China).	732.00	Each	732.00	Each
S-317	GI Tee 1-1/4" dia. (China).	589.00	Each	589.00	Each
S-318	GI Tee 2" dia. (China).	1,098.00	Each	1,098.00	Each
S-319	GI Tee 2-1/2" dia. (China).	2,679.00	Each	2,679.00	Each
S-320	GI Tee 3" dia. (China).	3,870.00	Each	3,870.00	Each
S-321	GI Tee 3/4" dia. (China).	220.00	Each	220.00	Each
S-322	GI Tee 4" dia. (China).	5,893.00	Each	5,893.00	Each
S-323	GI Tee 6" dia. (China).	24,951.00	Each	24,951.00	Each
S-323a	G.I Tee of size up to 2" to 6" dia = 50 to 150 mm.	3,560.00	Each	3,560.00	Each
S-324	GI Union 1/2" dia. (China).	353.00	Each	353.00	Each
S-325	GI Union 1" dia. (China).	768.00	Each	768.00	Each
S-326	GI Union 1-1/2" dia. (China).	1,261.00	Each	1,261.00	Each
S-327	GI Union 1-1/4" dia. (China).	929.00	Each	929.00	Each
S-328	GI Union 2" dia. (China).	1,725.00	Each	1,725.00	Each
S-329	GI Union 2-1/2" dia. (China).	3,713.00	Each	3,713.00	Each
S-330	GI Union 3" dia. (China).	4,933.00	Each	4,933.00	Each
S-331	GI Union 3/4" dia. (China).	473.00	Each	473.00	Each
S-332	GI Union 4" dia. (China).	8,684.00	Each	8,684.00	Each
S-333	GI Union 6" dia. (China).	43,044.00	Each	43,044.00	Each
	POLYETHYLENE OVER HEAD WATER TANKS				
S-334	Over head water tank (vertical)made of food grade polyethylene material 500 gallon. (Suppertuff)	25,000.00	Each	25,000.00	Each

Sub-Head Code-133

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-335	Over head water tank(horizontal) made of food grade polyethylene material 150 gallon. (Suppertuff)	7,000.00	Each	7,000.00	Each
S-336	Over head water tank(horizontal) made of food grade polyethylene material 200 gallon. (Suppertuff)	8,500.00	Each	8,500.00	Each
S-337	Over head water tank(horizontal) made of food grade polyethylene material 250 gallon. (Suppertuff)	10,500.00	Each	10,500.00	Each
S-338	Over head water tank(horizontal) made of food grade polyethylene material 300 gallon. (Suppertuff)	12,500.00	Each	12,500.00	Each
S-339	Over head water tank(horizontal) made of food grade polyethylene material 75 gallon. (Suppertuff)	3,800.00	Each	3,800.00	Each
S-340	Over head water tank(vertical) made of food grade polyethylene material 1000 gallon. (Suppertuff)	75,000.00	Each	75,000.00	Each
S-341	Over head water tank(vertical) made of food grade polyethylene material 125 gallon. (Suppertuff)	5,000.00	Each	5,000.00	Each
S-342	Over head water tank(vertical) made of food grade polyethylene material 150 gallon. (Suppertuff)	6,400.00	Each	6,400.00	Each
S-343	Over head water tank(vertical) made of food grade polyethylene material 1500 gallon. (Suppertuff)	85,000.00	Each	85,000.00	Each
S-344	Over head water tank(vertical) made of food grade polyethylene material 200 gallon. (Suppertuff)	8,500.00	Each	8,500.00	Each
S-345	Over head water tank(vertical) made of food grade polyethylene material 250 gallon. (Suppertuff)	9,600.00	Each	9,600.00	Each
S-346	Over head water tank(vertical) made of food grade polyethylene material 300 gallon. (Suppertuff)	12,000.00	Each	12,000.00	Each
S-347	Over head water tank(vertical) made of food grade polyethylene material 350 gallon. (Suppertuff)	14,000.00	Each	14,000.00	Each
S-348	Over head water tank(vertical) made of food grade polyethylene material 400 gallon. (Suppertuff)	16,000.00	Each	16,000.00	Each
S-349	Over head water tank(vertical) made of food grade polyethylene material 50 gallon. (Suppertuff)	2,200.00	Each	2,200.00	Each
S-350	Polyethylene Loft water tank size 36" x 36" x 18" (Suppertuff)	6,000.00	Each	6,000.00	Each
	uPVC PIPES AND FITTINGS				
S-351	Jointing Solution for UPVC pipes 250 grams tin.	230.00	tin	230.00	tin
S-352	Jointing Solution for UPVC pipes 500 grams tin.	350.00	tin	350.00	tin
S-353	uPVC Elbow 1" dia (25 mm) 45 degree.	150.00	Each	150.00	Each

Sub-Head Code-133

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-354	uPVC Elbow 1" dia (25 mm) 90 degree.	150.00	Each	150.00	Each
S-355	uPVC Elbow 1-1/2" dia (40 mm) 45 degree.	160.00	Each	160.00	Each
S-356	uPVC Elbow 1-1/2" dia (40 mm) 90 degree.	162.00	Each	162.00	Each
S-357	uPVC Elbow 1-1/4" dia (32 mm) 45 degree.	140.00	Each	140.00	Each
S-358	uPVC Elbow 1-1/4" dia (32 mm) 90 degree.	140.00	Each	140.00	Each
S-359	uPVC Elbow 2" dia (50 mm) 45 degree.	181.00	Each	181.00	Each
S-360	uPVC Elbow 2" dia (50 mm) 90 degree.	194.00	Each	194.00	Each
S-361	uPVC Elbow 2-1/2" dia (63 mm) 90 degree.	320.00	Each	320.00	Each
S-362	uPVC Elbow 3" dia (75 mm) 90 degree.	428.00	Each	428.00	Each
S-363	uPVC Elbow 3/4" dia (20 mm) 45 degree.	115.00	Each	115.00	Each
S-364	uPVC Elbow 3/4" dia (20 mm) 90 degree.	115.00	Each	115.00	Each
S-365	uPVC Elbow 4" dia (100 mm) 90 degree.	539.00	Each	539.00	Each
S-366	uPVC Elbow 6" dia (150 mm) 90 degree.	1,700.00	Each	1,700.00	Each
S-367	uPVC End Cap 1" dia (25 mm)	140.00	Each	140.00	Each
S-368	uPVC End Cap 1-1/2" dia (40 mm)	150.00	Each	150.00	Each
S-369	uPVC End Cap 1-1/4" dia (32 mm)	150.00	Each	150.00	Each
S-370	uPVC End Cap 2-1/2" dia (63 mm)	167.00	Each	167.00	Each
S-371	uPVC End Cap 3" dia (75 mm)	312.00	Each	312.00	Each
S-372	uPVC End Cap 3/4" dia (20 mm)	110.00	Each	110.00	Each
S-373	uPVC Female Adoptor 1" dia (25 mm)	140.00	Each	140.00	Each
S-374	uPVC Female Adoptor 1-1/2" dia (40 mm)	180.00	Each	180.00	Each
S-375	uPVC Female Adoptor 2" dia (50 mm)	210.00	Each	210.00	Each
S-376	uPVC Female Adoptor 3/4" dia (20 mm)	90.00	Each	90.00	Each
S-377	uPVC Female Elbow 1-1/2"x 1-1/4" dia	200.00	Each	200.00	Each
S-378	uPVC Female Elbow 2"x 1" dia	240.00	Each	240.00	Each
S-379	uPVC Female Elbow 2"x 1-1/2" dia	260.00	Each	260.00	Each
S-380	uPVC Female Elbow 2"x 3/4" dia	220.00	Each	220.00	Each
S-381	uPVC Female Tee 1-1/2"x 1-1/4" dia	200.00	Each	200.00	Each
S-382	uPVC Female Tee 2"x 1" dia	220.00	Each	220.00	Each
S-383	uPVC Female Tee 2"x 1-1/2" dia	240.00	Each	240.00	Each
S-384	uPVC Female Tee 2"x 3/4" dia	230.00	Each	230.00	Each
S-385	uPVC male Adoptor 1" dia (25 mm)	120.00	Each	120.00	Each
S-386	uPVC male Adoptor 1-1/2" dia (40 mm)	140.00	Each	140.00	Each
S-387	uPVC male Adoptor 2" dia (50 mm)	200.00	Each	200.00	Each
S-388	uPVC male Adoptor 3" dia (75 mm)	260.00	Each	260.00	Each
S-389	uPVC male Adoptor 3/4" dia (20 mm)	90.00	Each	90.00	Each
S-390	uPVC male Adoptor 4" dia (100 mm)	300.00	Each	300.00	Each
S-391	uPVC Non Pressure Pipe of 2 inch dia (50 mm).	90.00	Rft.	295.29	Mtr
S-392	uPVC Non Pressure Pipe of 3 inch dia (75 mm).	120.00	Rft.	393.72	Mtr
S-393	uPVC Non Pressure Pipe of 4 inch dia (100 mm).	190.00	Rft.	623.39	Mtr
S-394	uPVC Non Pressure Pipe of 6 inch dia (150 mm).	260.00	Rft.	853.06	Mtr
S-395	uPVC Pressure Pipe of class 'B' 3 inch dia pipe	150.00	Rft.	492.15	Mtr
S-396	uPVC Pressure Pipe of class 'B' 4 inch dia pipe	200.00	Rft.	656.20	Mtr
S-397	uPVC Pressure Pipe of class 'B' 5 inch dia pipe	280.00	Rft.	918.68	Mtr
S-398	uPVC Pressure Pipe of class 'B' 6 inch dia pipe	320.00	Rft.	1,049.92	Mtr
S-399	uPVC Pressure Pipe of class 'B' 8 inch dia pipe	470.00	Rft.	1,542.07	Mtr
S-400	uPVC Pressure Pipe of class 'C' 2 inch dia pipe	110.00	Rft.	360.91	Mtr
S-401	uPVC Pressure Pipe of class 'C' 2-1/2 inch dia pipe	135.00	Rft.	442.94	Mtr

Sub-Head Code-133

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-402	uPVC Pressure Pipe of class 'C' 3 inch dia pipe	150.00	Rft.	492.15	Mtr
S-403	uPVC Pressure Pipe of class 'C' 4 inch dia pipe	210.00	Rft.	689.01	Mtr
S-404	uPVC Pressure Pipe of class 'C' 5 inch dia pipe	290.00	Rft.	951.49	Mtr
S-405	uPVC Pressure Pipe of class 'C' 6 inch dia pipe	350.00	Rft.	1,148.35	Mtr
S-406	uPVC Pressure Pipe of class 'C' 8 inch dia pipe	520.00	Rft.	1,706.12	Mtr
S-407	uPVC Pressure Pipe of class 'D' 1-1/2 inch dia pipe.	150.00	Rft.	492.15	Mtr
S-408	uPVC Pressure Pipe of class 'D' 1-1/4 inch dia pipe.	130.00	Rft.	426.53	Mtr
S-409	uPVC Pressure Pipe of class 'D' 2 inch dia pipe.	215.00	Rft.	705.42	Mtr
S-410	uPVC Pressure Pipe of class 'D' 2-1/2 inch dia pipe.	240.00	Rft.	787.44	Mtr
S-411	uPVC Pressure Pipe of class 'D' 3 inch dia pipe.	280.00	Rft.	918.68	Mtr
S-412	uPVC Pressure Pipe of class 'D' 4 inch dia pipe.	310.00	Rft.	1,017.11	Mtr
S-413	uPVC Pressure Pipe of class 'D' 5 inch dia pipe.	340.00	Rft.	1,115.54	Mtr
S-414	uPVC Pressure Pipe of class 'D' 6 inch dia pipe.	410.00	Rft.	1,345.21	Mtr
S-415	uPVC Pressure Pipe of class 'D' 8 inch dia pipe.	560.00	Rft.	1,837.36	Mtr
S-416	uPVC Pressure Pipe of class 'E' 1 inch dia pipe.	40.00	Rft.	131.24	Mtr
S-417	uPVC Pressure Pipe of class 'E' 1-1/2 inch dia pipe.	50.00	Rft.	164.05	Mtr
S-418	uPVC Pressure Pipe of class 'E' 1-1/4 inch dia pipe.	45.00	Rft.	147.65	Mtr
S-419	uPVC Pressure Pipe of class 'E' 2 inch dia pipe.	260.00	Rft.	853.06	Mtr
S-420	uPVC Pressure Pipe of class 'E' 2-1/2 inch dia pipe.	280.00	Rft.	918.68	Mtr
S-421	uPVC Pressure Pipe of class 'E' 3 inch dia pipe.	310.00	Rft.	1,017.11	Mtr
S-422	uPVC Pressure Pipe of class 'E' 3/4 inch dia pipe.	35.00	Rft.	114.84	Mtr
S-423	uPVC Pressure Pipe of class 'E' 4 inch dia pipe.	380.00	Rft.	1,246.78	Mtr
S-424	uPVC Pressure Pipe of class 'E' 5 inch dia pipe.	410.00	Rft.	1,345.21	Mtr
S-425	uPVC Pressure Pipe of class 'E' 6 inch dia pipe.	480.00	Rft.	1,574.88	Mtr
S-426	uPVC Pressure Pipe of class 'E' 8 inch dia pipe.	590.00	Rft.	1,935.79	Mtr
S-427	uPVC Reducer Bush 1"x 3/4" dia	21.75	Each	21.75	Each
S-428	uPVC Reducer Bush 1-1/2" x 1-1/4" dia	36.75	Each	36.75	Each
S-429	uPVC Reducer Bush 1-1/2"x 1" dia	46.50	Each	46.50	Each
S-430	uPVC Reducer Bush 1-1/2"x 3/4" dia	41.25	Each	41.25	Each
S-431	uPVC Reducer Bush 1-1/4"x 1" dia	39.00	Each	39.00	Each
S-432	uPVC Reducer Bush 1-1/4"x 3/4" dia	26.25	Each	26.25	Each
S-433	uPVC Reducer Bush 2" x 1" dia	36.00	Each	36.00	Each
S-434	uPVC Reducer Bush 2" x 1-1/4" dia	57.00	Each	57.00	Each
S-435	uPVC Reducer Tee 1"x 3/4" dia	39.00	Each	39.00	Each
S-436	uPVC Reducer Tee 1-1/2"x 1" dia	101.25	Each	101.25	Each
S-437	uPVC Reducer Tee 1-1/2"x 1-1/4" dia	105.75	Each	105.75	Each
S-438	uPVC Reducer Tee 2"x 1" dia	175.50	Each	175.50	Each
S-439	uPVC Reducer Tee 2"x 1-1/2" dia	211.50	Each	211.50	Each
S-440	uPVC Reducer Tee 2"x 3/4" dia	177.75	Each	177.75	Each
S-441	uPVC Tee 1" dia (25 mm)	140.00	Each	140.00	Each
S-442	uPVC Tee 1-1/2" dia (40 mm)	160.00	Each	160.00	Each
S-443	uPVC Tee 1-1/4" dia (32 mm)	150.00	Each	150.00	Each
S-444	uPVC Tee 2" dia (50 mm)	200.00	Each	200.00	Each

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-445	uPVC Tee 2-1/2" dia (63 mm)	220.00	Each	220.00	Each
S-446	uPVC Tee 3" dia (75 mm)	340.00	Each	340.00	Each
S-447	uPVC Tee 3/4" dia (20 mm)	120.00	Each	120.00	Each
S-448	uPVC Tee 4" dia (100 mm)	380.00	Each	380.00	Each
S-449	uPVC Tee 6" dia (150 mm)	810.00	Each	810.00	Each
	POLYPROPYLENE RANDOM CO-POLYMER PIPES & FITTINGS FOR HOT AND COLD WATERSUPPLY.				
S-450	PPRC Aluminum Foil pipe 20 mm	32.00	Rft.	104.99	Ru.m
S-451	PPRC Aluminum Foil pipe 25 mm	93.00	Rft.	305.13	Ru.m
S-452	PPRC Aluminum Foil pipe 32 mm	151.00	Rft.	495.43	Ru.m
S-453	PPRC Aluminum Foil pipe 40 mm	235.00	Rft.	771.04	Ru.m
S-454	PPRC Aluminum Foil pipe 50 mm	450.00	Rft.	1,476.45	Ru.m
S-455	PPRC Aluminum Foil pipe 63 mm	687.00	Rft.	2,254.05	Ru.m
S-456	PPRC Ball Valve 20 mm.	643.50	Each	643.50	Each
S-457	PPRC Ball Valve 25 mm.	783.00	Each	783.00	Each
S-458	PPRC Ball Valve 32 mm.	928.00	Each	928.00	Each
S-459	PPRC Cross over 20 mm	140.00	Each	140.00	Each
S-460	PPRC Cross over 25 mm	184.00	Each	184.00	Each
S-461	PPRC Cross over 32 mm	253.00	Each	253.00	Each
S-462	PPRC Cross Tee 20 mm.	190.00	Each	190.00	Each
S-463	PPRC Cross Tee 25 mm.	220.00	Each	220.00	Each
S-464	PPRC Cross Tee 32 mm.	380.00	Each	380.00	Each
S-465	PPRC Cross Tee 40 mm.	410.00	Each	410.00	Each
S-466	PPRC Elbow 45 digree 20 mm	45.00	Each	45.00	Each
S-467	PPRC Elbow 45 digree 25 mm	55.00	Each	55.00	Each
S-468	PPRC Elbow 45 digree 32 mm	90.00	Each	90.00	Each
S-469	PPRC Elbow 45 digree 40 mm	120.00	Each	120.00	Each
S-470	PPRC Elbow 90 digree 110 mm	480.00	Each	480.00	Each
S-471	PPRC Elbow 90 digree 20 mm	45.00	Each	45.00	Each
S-472	PPRC Elbow 90 digree 25 mm	55.00	Each	55.00	Each
S-473	PPRC Elbow 90 digree 32 mm	90.00	Each	90.00	Each
S-474	PPRC Elbow 90 digree 40 mm	120.00	Each	120.00	Each
S-475	PPRC Elbow 90 digree 50 mm	180.00	Each	180.00	Each
S-476	PPRC Elbow 90 digree 63 mm	240.00	Each	240.00	Each
S-477	PPRC Elbow 90 digree 75 mm	310.00	Each	310.00	Each
S-478	PPRC Elbow 90 digree 90 mm	430.00	Each	430.00	Each
S-479	PPRC Elbow female Thread 20mm x 1/2".	110.00	Each	110.00	Each
S-480	PPRC Elbow female Thread 20mm x 3/4".	120.00	Each	120.00	Each
S-481	PPRC Elbow female Thread 25mm x 1/2".	248.00	Each	248.00	Each
S-482	PPRC Elbow female Thread 25mm x 3/4".	305.00	Each	305.00	Each
S-483	PPRC Elbow female Thread 32mm x 1".	678.00	Each	678.00	Each
S-484	PPRC Elbow female Thread 32mm x 3/4".	489.00	Each	489.00	Each
S-485	PPRC Elbow male Thread 20mm x 1/2".	200.00	Each	200.00	Each
S-486	PPRC Elbow male Thread 20mm x 3/4".	210.00	Each	210.00	Each
S-487	PPRC Elbow male Thread 25mm x 1/2".	248.00	Each	248.00	Each
S-488	PPRC Elbow male Thread 25mm x 3/4".	305.00	Each	305.00	Each
S-489	PPRC Elbow male Thread 32mm x 1".	678.00	Each	678.00	Each
S-490	PPRC Elbow male Thread 32mm x 3/4".	489.00	Each	489.00	Each

Sub-Head Code-133

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-491	PPRC End Cap 20 mm	30.00	Each	30.00	Each
S-492	PPRC End Cap 25 mm	40.00	Each	40.00	Each
S-493	PPRC End Cap 32 mm	60.00	Each	60.00	Each
S-494	PPRC End Cap 40 mm	90.00	Each	90.00	Each
S-495	PPRC End Cap 50 mm	110.00	Each	110.00	Each
S-496	PPRC End Cap 63 mm	150.00	Each	150.00	Each
S-497	PPRC Female Union Plastic to Metal 20mm x 1/2".	380.00	Each	380.00	Each
S-498	PPRC Female Union Plastic to Metal 25mm x 3/4".	530.00	Each	530.00	Each
S-499	PPRC Female Union Plastic to Metal 32mm x 1".	900.00	Each	900.00	Each
S-500	PPRC Female Union Plastic to Metal 40mm x 1-1/4".	1,300.00	Each	1,300.00	Each
S-501	PPRC Female Union Plastic to Metal 50mm x 1-1/2".	1,900.00	Each	1,900.00	Each
S-502	PPRC Male Union Plastic to Metal 20mm x 1/2".	400.00	Each	400.00	Each
S-503	PPRC Male Union Plastic to Metal 25mm x 3/4".	550.00	Each	550.00	Each
S-504	PPRC Male Union Plastic to Metal 32mm x 1".	880.00	Each	880.00	Each
S-505	PPRC Male Union Plastic to Metal 40mm x 1-1/4".	1,300.00	Each	1,300.00	Each
S-506	PPRC Male Union Plastic to Metal 50mm x 1-1/2".	2,000.00	Each	2,000.00	Each
S-507	PPRC Pipe Clip 20 mm	20.00	Each	20.00	Each
S-508	PPRC Pipe Clip 25 mm	24.00	Each	24.00	Each
S-509	PPRC Pipe Clip 32 mm	32.00	Each	32.00	Each
S-510	PPRC Pipe Clip 40 mm	51.00	Each	51.00	Each
S-511	PPRC Pipe Clip 50 mm	60.00	Each	60.00	Each
S-512	PPRC Plug Thread 20 mm.	15.00	Each	15.00	Each
S-513	PPRC Plug Thread 25 mm.	20.00	Each	20.00	Each
S-514	PPRC PN-20 Pipes (110 mm)	2,015.00	Rft.	6,611.22	Ru.m
S-515	PPRC PN-20 Pipes (75 mm)	1,138.00	Rft.	3,733.78	Ru.m
S-516	PPRC PN-20 Pipes (90 mm)	1,540.00	Rft.	5,052.74	Ru.m
S-517	PPRC PN-20 Pipes (20 mm)	57.00	Rft.	187.02	Ru.m
S-518	PPRC PN-20 Pipes (25 mm)	90.00	Rft.	295.29	Ru.m
S-519	PPRC PN-20 Pipes (32 mm)	141.00	Rft.	462.62	Ru.m
S-520	PPRC PN-20 Pipes (40 mm)	219.00	Rft.	718.54	Ru.m
S-521	PPRC PN-20 Pipes (50 mm)	401.00	Rft.	1,315.68	Ru.m
S-522	PPRC PN-20 Pipes (63 mm)	633.00	Rft.	2,076.87	Ru.m
S-523	PPRC Reducer Socket 110x90 mm dia	1,260.00	Each	1,260.00	Each
S-524	PPRC Reducer Socket 25x20 mm dia	28.00	Each	28.00	Each
S-525	PPRC Reducer Socket 32x20 mm dia	36.40	Each	36.40	Each
S-526	PPRC Reducer Socket 32x25 mm dia	106.40	Each	106.40	Each
S-527	PPRC Reducer Socket 40x20 mm dia	63.00	Each	63.00	Each
S-528	PPRC Reducer Socket 40x25 mm dia	138.60	Each	138.60	Each
S-529	PPRC Reducer Socket 40x32 mm dia	200.20	Each	200.20	Each
S-530	PPRC Reducer Socket 50x20 mm dia	70.00	Each	70.00	Each
S-531	PPRC Reducer Socket 50x25 mm dia	151.20	Each	151.20	Each
S-532	PPRC Reducer Socket 50x32 mm dia	208.60	Each	208.60	Each
S-533	PPRC Reducer Socket 50x40 mm dia	222.60	Each	222.60	Each
S-534	PPRC Reducer Socket 63x32 mm dia	323.40	Each	323.40	Each
S-535	PPRC Reducer Socket 63x40 mm dia	54.60	Each	54.60	Each

Sub-Head Code-133

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-536	PPRC Reducer Socket 63x50 mm dia	347.20	Each	347.20	Each
S-537	PPRC Reducer Socket 75x50 mm dia	196.00	Each	196.00	Each
S-538	PPRC Reducer Socket 75x63 mm dia	210.00	Each	210.00	Each
S-539	PPRC Reducer Socket 90x63 mm dia	336.00	Each	336.00	Each
S-540	PPRC Reducer Socket 90x75 mm dia	336.00	Each	336.00	Each
S-541	PPRC Reducing Tee 25/20/20 mm.	56.00	Each	56.00	Each
S-542	PPRC Reducing Tee 25/20/25 mm.	77.00	Each	77.00	Each
S-543	PPRC Reducing Tee 32/20/20 mm.	84.00	Each	84.00	Each
S-544	PPRC Reducing Tee 32/20/32 mm.	112.00	Each	112.00	Each
S-545	PPRC Reducing Tee 32/25/20 mm.	112.00	Each	112.00	Each
S-546	PPRC Reducing Tee 32/25/32 mm.	225.40	Each	225.40	Each
S-547	PPRC Reducing Tee 40/20/40 mm.	189.00	Each	189.00	Each
S-548	PPRC Reducing Tee 40/25/40 mm.	354.20	Each	354.20	Each
S-549	PPRC Reducing Tee 40/32/40 mm.	365.40	Each	365.40	Each
S-550	PPRC Socket 110 mm dia	408.80	Each	408.80	Each
S-551	PPRC Socket 20 mm dia	28.00	Each	28.00	Each
S-552	PPRC Socket 25 mm dia	58.80	Each	58.80	Each
S-553	PPRC Socket 32 mm dia	106.40	Each	106.40	Each
S-554	PPRC Socket 40 mm dia	193.20	Each	193.20	Each
S-555	PPRC Socket 50 mm dia	352.80	Each	352.80	Each
S-556	PPRC Socket 63 mm dia	588.00	Each	588.00	Each
S-557	PPRC Socket 75 mm dia	610.00	Each	610.00	Each
S-558	PPRC Socket 90 mm dia	224.00	Each	224.00	Each
S-559	PPRC Socket Female Thread 20mm x 1/2"	154.00	Each	154.00	Each
S-560	PPRC Socket Female Thread 20mm x 3/4".	161.00	Each	161.00	Each
S-561	PPRC Socket Female Thread 25mm x 1/2".	324.80	Each	324.80	Each
S-562	PPRC Socket Female Thread 25mm x 3/4".	411.60	Each	411.60	Each
S-563	PPRC Socket Female Thread 32mm x 1".	883.40	Each	883.40	Each
S-564	PPRC Socket Female Thread 40mm x 1-1/4".	672.00	Each	672.00	Each
S-565	PPRC Socket Female Thread 50mm x 1-1/2"	980.00	Each	980.00	Each
S-566	PPRC Socket Female Thread 63mm x 2".	1,820.00	Each	1,820.00	Each
S-567	PPRC Socket Male Thread 20mm x 1/2".	266.00	Each	266.00	Each
S-568	PPRC Socket Male Thread 20mm x 3/4".	280.00	Each	280.00	Each
S-569	PPRC Socket male Thread 25 x 1/2".	294.00	Each	294.00	Each
S-570	PPRC Socket male Thread 25mm x 3/4".	378.00	Each	378.00	Each
S-571	PPRC Socket male Thread 32mm x 1".	700.00	Each	700.00	Each
S-572	PPRC Socket male Thread 40mm x 1-1/4".	910.00	Each	910.00	Each
S-573	PPRC Socket male Thread 50mm x 1-1/2".	1,400.00	Each	1,400.00	Each
S-574	PPRC Socket male Thread 63mm x 2".	2,380.00	Each	2,380.00	Each
S-575	PPRC Socket male Thread 75mm x 2-1/2".	3,500.00	Each	3,500.00	Each
S-576	PPRC Tee 110 mm	2,100.00	Each	2,100.00	Each
S-577	PPRC Tee 20 mm	39.20	Each	39.20	Each
S-578	PPRC Tee 25 mm	99.40	Each	99.40	Each
S-579	PPRC Tee 32 mm	196.00	Each	196.00	Each
S-580	PPRC Tee 40 mm	281.40	Each	281.40	Each
S-581	PPRC Tee 50 mm	532.00	Each	532.00	Each
S-582	PPRC Tee 63 mm	1,022.00	Each	1,022.00	Each
S-583	PPRC Tee 75 mm	1,150.00	Each	1,150.00	Each
S-584	PPRC Tee 90 mm	1,260.00	Each	1,260.00	Each

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-585	PPRC Tee female Thread 20mm x 1/2".	182.00	Each	182.00	Each
S-586	PPRC Tee female Thread 20mm x 3/4".	238.00	Each	238.00	Each
S-587	PPRC Tee female Thread 25mm x 1/2".	404.60	Each	404.60	Each
S-588	PPRC Tee female Thread 25mm x 3/4".	585.20	Each	585.20	Each
S-589	PPRC Tee female Thread 32mm x 1".	1,002.40	Each	1,002.40	Each
S-590	PPRC Tee female Thread 32mm x 3/4".	733.60	Each	733.60	Each
S-591	PPRC Tee male Thread 20mm x 1/2".	294.00	Each	294.00	Each
S-592	PPRC Tee male Thread 20mm x 3/4".	336.00	Each	336.00	Each
S-593	PPRC Tee male Thread 25mm x 1/2".	336.00	Each	336.00	Each
S-594	PPRC Tee male Thread 25mm x 3/4".	406.00	Each	406.00	Each
S-595	PPRC Throttle Headed valve 20 mm.	612.14	Each	612.14	Each
S-596	PPRC Throttle Headed valve 25 mm.	773.86	Each	773.86	Each
S-597	PPRC Throttle Headed valve 32 mm.	1,050.00	Each	1,050.00	Each
S-598	PPRC Union Plastic to Plastic 20 mm.	514.50	Each	514.50	Each
S-599	PPRC Union Plastic to Plastic 25 mm.	640.50	Each	640.50	Each
S-600	PPRC Union Plastic to Plastic 32 mm.	913.50	Each	913.50	Each
S-601	PPRC Union Plastic to Plastic 40 mm.	1,050.00	Each	1,050.00	Each
S-602	PPRC Union Plastic to Plastic 50 mm.	1,310.40	Each	1,310.40	Each
S-603	PPRC Union Plastic to Plastic 63 mm.	1,701.00	Each	1,701.00	Each
S-604	PPRC welding device complete with steel box	23,100.00	Each	23,100.00	Each
	C.I. SPUN PIPES AND FITTINGS				
S-605	C.I Collar single 2" dia (50 mm)	524.16	Each	524.16	Each
S-606	C.I Collar single 3" dia (75 mm)	672.00	Each	672.00	Each
S-607	C.I Collar single 4" dia (100 mm)	752.64	Each	752.64	Each
S-608	C.I Collar single 6" dia (150 mm)	1,930.88	Each	1,930.88	Each
S-609	C.I Cowal 2" dia (50 mm)	434.56	Each	434.56	Each
S-610	C.I Cowal 3" dia (75 mm)	663.04	Each	663.04	Each
S-611	C.I Cowal 4" dia (100 mm)	1,008.00	Each	1,008.00	Each
S-612	C.I Floor Trape 3"x2" dia (75x50 mm) .	336.00	Each	336.00	Each
S-613	C.I Floor Trape 4"x2" dia (100x50 mm) .	1,881.60	Each	1,881.60	Each
S-614	C.I Floor Trape 4"x3" dia (100x75 mm) .	1,935.36	Each	1,935.36	Each
S-615	C.I Floor Trape 4"x4" dia (100x100 mm) .	2,490.88	Each	2,490.88	Each
S-616	C.I Floor Trape 6"x2" dia (150x50 mm) .	2,490.88	Each	2,490.88	Each
S-617	C.I Floor Trape 6"x3" dia (150x75 mm) .	2,490.88	Each	2,490.88	Each
S-618	C.I Floor Trape 6"x4" dia (150x100 mm) .	2,938.88	Each	2,938.88	Each
S-619	C.I Inspection Pipe 2" dia (50 mm)	1,370.88	Each	1,370.88	Each
S-620	C.I Inspection Pipe 3" dia (75 mm)	1,706.88	Each	1,706.88	Each
S-621	C.I Inspection Pipe 4" dia (100 mm)	2,387.84	Each	2,387.84	Each
S-622	C.I Inspection Pipe 6" dia (150 mm)	3,812.48	Each	3,812.48	Each
S-623	C.I Offset Bend 2" dia (50 mm)	1,249.92	Each	1,249.92	Each
S-624	C.I Offset Bend 3" dia (75 mm)	1,406.72	Each	1,406.72	Each
S-625	C.I Offset Bend 4" dia (100 mm)	1,662.08	Each	1,662.08	Each
S-626	C.I Offset Bend 6" dia (150 mm)	5,241.60	Each	5,241.60	Each
S-627	C.I Pipe (Spun) 10" dia (250 mm)	1,680.00	Rft	5,512.08	Ru.m
S-628	C.I Pipe (Spun) 2" dia (50 mm)	350.00	Rft	1,148.35	Ru.m
S-629	C.I Pipe (Spun) 3" dia (75 mm)	420.00	Rft	1,378.02	Ru.m
S-630	C.I Pipe (Spun) 4" dia (100 mm)	560.00	Rft	1,837.36	Ru.m
S-631	C.I Pipe (Spun) 6" dia (150 mm)	1,050.00	Rft	3,445.05	Ru.m

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Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-632	C.I Pipe (Spun) 8" dia (200 mm)	1,400.00	Rft	4,593.40	Ru.m
S-633	C.I Plain Branch 3"x2" dia (75x50 mm) of required degree.	1,729.28	Each	1,729.28	Each
S-634	C.I Plain Branch 3"x2"x2" dia (75x50x50 mm) of required degree.	3,050.88	Each	3,050.88	Each
S-635	C.I Plain Branch 4"x2" dia (100x50 mm) of required degree.	2,670.08	Each	2,670.08	Each
S-636	C.I Plain Branch 4"x2x2" dia (100x50x50 mm) of required degree.	3,687.04	Each	3,687.04	Each
S-637	C.I Plain Branch 4"x3" dia (100x75 mm) of required degree.	2,670.08	Each	2,670.08	Each
S-638	C.I Plain Branch 4"x3"x3" dia (100x75x75 mm) of required degree.	3,561.60	Each	3,561.60	Each
S-639	C.I Plain Branch 6"x3" dia (150x75 mm) of required degree.	5,846.40	Each	5,846.40	Each
S-640	C.I Plain Branch 6"x3"x3" dia (150x75x75 mm) of required degree.	6,863.36	Each	6,863.36	Each
S-641	C.I Plain Branch 6"x4" dia (150x100 mm) of required degree.	5,846.40	Each	5,846.40	Each
S-642	C.I Plain Branch 6"x4"x4" dia (150x100x100 mm) of required degree.	7,454.72	Each	7,454.72	Each
S-643	C.I Plain Branch 8"x4" dia (200x100 mm) of required degree.	16,128.00	Each	16,128.00	Each
S-644	C.I Plain Branch 8"x4"x4" dia (200x100x100 mm) of required degree.	8,422.40	Each	8,422.40	Each
S-645	C.I Plain Branch 8"x6" dia (200x150 mm) of required degree.	16,782.08	Each	16,782.08	Each
S-646	C.I Plain Branch 8"x6"x6" dia (200x150150 mm) of required degree.	24,407.04	Each	24,407.04	Each
S-647	C.I Plain Tee 3"x2" dia (75x50 mm) of required degree.	1,881.60	Each	1,881.60	Each
S-648	C.I Plain Tee 4"x2" dia (100x50 mm) of required degree.	1,908.48	Each	1,908.48	Each
S-649	C.I Plain Tee 4"x3" dia (100x75 mm) of required degree.	1,984.64	Each	1,984.64	Each
S-650	C.I Plain Tee 6"x3" dia (150x75 mm) of required degree.	3,861.76	Each	3,861.76	Each
S-651	C.I Plain Tee 6"x4" dia (150x100 mm) of required degree.	3,861.76	Each	3,861.76	Each
S-652	C.I Plain Tee 8"x3" dia (200x75 mm) of required degree.	11,697.28	Each	11,697.28	Each
S-653	C.I Plain Tee 8"x4" dia (200x100 mm) of required degree.	12,664.96	Each	12,664.96	Each
S-654	C.I Plain Tee 8"x6" dia (200x150 mm) of required degree.	13,475.84	Each	13,475.84	Each
S-655	C.I Plain Bend 2" dia (50 mm) required degree.	864.64	Each	864.64	Each
S-656	C.I Plain Bend 3" dia (75 mm) required degree.	1,043.84	Each	1,043.84	Each
S-657	C.I Plain Bend 4" dia (100 mm) required degree.	1,527.68	Each	1,527.68	Each
S-658	C.I Plain Bend 6" dia (150 mm) required degree.	3,507.84	Each	3,507.84	Each
S-659	C.I Plain Bend 8" dia (200 mm) required degree.	11,876.48	Each	11,876.48	Each

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-660	C.I Plain Branch double 2" dia (50 mm) of required degree.	2,033.92	Each	2,033.92	Each
S-661	C.I Plain Branch double 3" dia (75 mm) of required degree.	3,001.60	Each	3,001.60	Each
S-662	C.I Plain Branch double 4" dia (100 mm) of required degree.	3,561.60	Each	3,561.60	Each
S-663	C.I Plain Branch double 6" dia (150 mm) of required degree.	8,534.40	Each	8,534.40	Each
S-664	C.I Plain Branch single 2" dia (50 mm) of required degree.	1,344.00	Each	1,344.00	Each
S-665	C.I Plain Branch single 3" dia (75 mm) of required degree.	1,881.60	Each	1,881.60	Each
S-666	C.I Plain Branch single 4" dia (100 mm) of required degree.	2,737.28	Each	2,737.28	Each
S-667	C.I Plain Branch single 6" dia (150 mm) of required degree.	5,846.40	Each	5,846.40	Each
S-668	C.I Plain Branch single 8" dia (200 mm) of required degree.	16,401.28	Each	16,401.28	Each
S-669	C.I Plain Tee 2" dia (50 mm) of required degree.	1,016.96	Each	1,016.96	Each
S-670	C.I Plain Tee 3" dia (75 mm) of required degree.	1,527.68	Each	1,527.68	Each
S-671	C.I Plain Tee 4" dia (100 mm) of required degree.	2,289.28	Each	2,289.28	Each
S-672	C.I Plain Tee 6" dia (150 mm) of required degree.	4,067.84	Each	4,067.84	Each
S-673	C.I Plain Tee 8" dia (200 mm) of required degree.	13,731.20	Each	13,731.20	Each
S-674	C.I Plug Branch 3"x2" dia (75x50 mm) of required degree.	1,805.44	Each	1,805.44	Each
S-675	C.I Plug Branch 3"x2"x2" dia (75x50x50 mm) of required degree.	3,306.24	Each	3,306.24	Each
S-676	C.I Plug Branch 4"x2" dia (100x50 mm) of required degree.	2,746.24	Each	2,746.24	Each
S-677	C.I Plug Branch 4"x2x2" dia (100x50x50 mm) of required degree.	3,687.04	Each	3,687.04	Each
S-678	C.I Plug Branch 4"x3" dia (100x75 mm) of required degree.	2,746.24	Each	2,746.24	Each
S-679	C.I Plug Branch 4"x3"x3" dia (100x75x75 mm) of required degree.	3,687.04	Each	3,687.04	Each
S-680	C.I Plug Branch 6"x3" dia (150x75 mm) of required degree.	6,357.12	Each	6,357.12	Each
S-681	C.I Plug Branch 6"x3"x3" dia (150x75x75 mm) of required degree.	7,454.72	Each	7,454.72	Each
S-682	C.I Plug Branch 6"x4" dia (150x100 mm) of required degree.	6,101.76	Each	6,101.76	Each
S-683	C.I Plug Branch 6"x4"x4" dia (150x100x100 mm) of required degree.	7,880.32	Each	7,880.32	Each
S-684	C.I Plug Branch 8"x4" dia (200x100 mm) of required degree.	7,500.00	Each	7,500.00	Each
S-685	C.I Plug Branch 8"x4"x4" dia (200x100x100 mm) of required degree.	8,924.16	Each	8,924.16	Each
S-686	C.I Plug Branch 8"x6" dia (200x150 mm) of required degree.	17,288.32	Each	17,288.32	Each
S-687	C.I Plug Branch 8"x6"x6" dia (200x150150 mm) of required degree.	18,500.00	Each	18,500.00	Each

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Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-688	C.I Plug Tee 3"x2" dia (75x50 mm) of required degree.	1,540.00	Each	1,540.00	Each
S-689	C.I Plug Tee 4"x2" dia (100x50 mm) of required degree.	1,984.64	Each	1,984.64	Each
S-690	C.I Plug Tee 4"x3" dia (100x75 mm) of required degree.	2,190.72	Each	2,190.72	Each
S-691	C.I Plug Tee 6"x3" dia (150x75 mm) of required degree.	4,067.84	Each	4,067.84	Each
S-692	C.I Plug Tee 6"x4" dia (150x100 mm) of required degree.	4,250.00	Each	4,250.00	Each
S-693	C.I Plug Tee 8"x3" dia (200x75 mm) of required degree.	11,948.16	Each	11,948.16	Each
S-694	C.I Plug Tee 8"x4" dia (200x100 mm) of required degree.	12,915.84	Each	12,915.84	Each
S-695	C.I Plug Tee 8"x6" dia (200x150 mm) of required degree.	13,780.48	Each	13,780.48	Each
S-696	C.I Plug Bend 2" dia (50 mm) required degree.	967.68	Each	967.68	Each
S-697	C.I Plug Bend 3" dia (75 mm) required degree.	1,146.88	Each	1,146.88	Each
S-698	C.I Plug Bend 4" dia (100 mm) required degree.	1,680.00	Each	1,680.00	Each
S-699	C.I Plug Bend 6" dia (150 mm) required degree.	3,812.48	Each	3,812.48	Each
S-700	C.I Plug Bend 8" dia (200 mm) required degree.	13,426.56	Each	13,426.56	Each
S-701	C.I Plug Branch double 2" dia (50 mm) of required degree.	2,123.52	Each	2,123.52	Each
S-702	C.I Plug Branch double 3" dia (75 mm) of required degree.	3,100.16	Each	3,100.16	Each
S-703	C.I Plug Branch double 4" dia (100 mm) of required degree.	3,812.48	Each	3,812.48	Each
S-704	C.I Plug Branch double 6" dia (150 mm) of required degree.	8,798.72	Each	8,798.72	Each
S-705	C.I Plug Branch single 2" dia (50 mm) of required degree.	1,473.92	Each	1,473.92	Each
S-706	C.I Plug Branch single 3" dia (75 mm) of required degree.	1,984.64	Each	1,984.64	Each
S-707	C.I Plug Branch Single 4" dia (100 mm) of required degree.	2,871.68	Each	2,871.68	Each
S-708	C.I Plug Branch single 6" dia (150 mm) of required degree.	6,052.48	Each	6,052.48	Each
S-709	C.I Plug Branch single 8" dia (200 mm) of required degree.	14,237.44	Each	14,237.44	Each
S-710	C.I Plug Tee 2" dia (50 mm) of required degree.	1,146.88	Each	1,146.88	Each
S-711	C.I Plug Tee 3" dia (75 mm) of required degree.	1,680.00	Each	1,680.00	Each
S-712	C.I Plug Tee 4" dia (100 mm) of required degree.	2,517.76	Each	2,517.76	Each
S-713	C.I Plug Tee 6" dia (150 mm) of required degree.	4,394.88	Each	4,394.88	Each
S-714	C.I Plug Tee 8" dia (200 mm) of required degree.	14,237.44	Each	14,237.44	Each
S-715	C.I Reducing Socket 3"x2" dia (75x50 mm) .	1,173.76	Each	1,173.76	Each
S-716	C.I Reducing Socket 4"x2" dia (100x50 mm) .	1,653.12	Each	1,653.12	Each
S-717	C.I Reducing Socket 4"x3" dia (100x75 mm) .	1,680.00	Each	1,680.00	Each
S-718	C.I Reducing Socket 6"x3" dia (150x75 mm) .	2,544.64	Each	2,544.64	Each
S-719	C.I Reducing Socket 6"x4" dia (150x100 mm) .	2,567.04	Each	2,567.04	Each
S-720	C.I Reducing Socket 8"x6" dia (200x150 mm) .	13,982.08	Each	13,982.08	Each

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-721	C.I Shoe Bend 3" dia (75 mm)	1,043.84	Each	1,043.84	Each
S-722	C.I Shoe Bend 4" dia (100 mm)	1,160.32	Each	1,160.32	Each
S-723	C.I Shoe Bend 6" dia (150 mm)	3,207.68	Each	3,207.68	Each
S-724	C.I Specials such as Tees, Bends, Yees, Reducers, Sockets, Flanges and any other cast iron fittings etc as required.	110.00	Lb	242.51	Kg
	POLY-ETHYLENE PIPES AND FITTINGS FOR COLD WATERSUPPLY SYSTEM				
S-725	P.E Pipes (PN 10) 110mm e/d	594.13	Rft	1,949.35	Ru.m
S-726	P.E Pipes (PN 10) 110mm e/d	594.13	Rft	1,949.35	Ru.m
S-727	P.E Pipes (PN 10) 125mm e/d	766.95	Rft	2,516.37	Ru.m
S-728	P.E Pipes (PN 10) 160mm e/d	1,256.16	Rft	4,121.45	Ru.m
S-729	P.E Pipes (PN 10) 200mm e/d	1,956.82	Rft	6,420.31	Ru.m
S-730	P.E Pipes (PN 10) 250mm e/d	3,059.81	Rft	10,039.24	Ru.m
S-731	P.E Pipes (PN 10) 63mm e/d	198.88	Rft	652.53	Ru.m
S-732	P.E Pipes (PN 10) 75mm e/d	282.09	Rft	925.55	Ru.m
S-733	P.E Pipes (PN 10) 90mm e/d	403.71	Rft	1,324.56	Ru.m
S-734	P.E Pipes (PN 12.5) 110mm e/d	726.49	Rft	2,383.62	Ru.m
S-735	P.E Pipes (PN 12.5) 125mm e/d	941.83	Rft	3,090.15	Ru.m
S-736	P.E Pipes (PN 12.5) 160mm e/d	1,539.62	Rft	5,051.50	Ru.m
S-737	P.E Pipes (PN 12.5) 180mm e/d	1,945.39	Rft	6,382.81	Ru.m
S-738	P.E Pipes (PN 12.5) 200mm e/d	2,398.24	Rft	7,868.63	Ru.m
S-739	P.E Pipes (PN 12.5) 250mm e/d	3,733.04	Rft	12,248.10	Ru.m
S-740	P.E Pipes (PN 12.5) 25mm e/d	39.55	Rft	129.76	Ru.m
S-741	P.E Pipes (PN 12.5) 32mm e/d	64.47	Rft	211.51	Ru.m
S-742	P.E Pipes (PN 12.5) 40mm e/d	99.21	Rft	325.52	Ru.m
S-743	P.E Pipes (PN 12.5) 50mm e/d	153.85	Rft	504.77	Ru.m
S-744	P.E Pipes (PN 12.5) 63mm e/d	242.77	Rft	796.54	Ru.m
S-745	P.E Pipes (PN 12.5) 75mm e/d	338.56	Rft	1,110.80	Ru.m
S-746	P.E Pipes (PN 12.5) 90mm e/d	489.89	Rft	1,607.33	Ru.m
S-747	P.E Pipes (PN 16) 110mm e/d	869.59	Rft	2,853.14	Ru.m
S-748	P.E Pipes (PN 16) 180mm e/d	2,321.43	Rft	7,616.62	Ru.m
S-749	P.E Pipes (PN 16) 125mm e/d	1,124.48	Rft	3,689.43	Ru.m
S-750	P.E Pipes (PN 16) 160mm e/d	1,839.32	Rft	6,034.79	Ru.m
S-751	P.E Pipes (PN 16) 200mm e/d	2,875.79	Rft	9,435.46	Ru.m
S-752	P.E Pipes (PN 16) 25mm e/d	52.00	Rft	170.61	Ru.m
S-753	P.E Pipes (PN 16) 32mm e/d	85.00	Rft	278.89	Ru.m
S-754	P.E Pipes (PN 16) 40mm e/d	135.00	Rft	442.94	Ru.m
S-755	P.E Pipes (PN 16) 50mm e/d	170.00	Rft	557.77	Ru.m
S-756	P.E Pipes (PN 16) 63mm e/d	288.72	Rft	947.30	Ru.m
S-757	P.E Pipes (PN 16) 75mm e/d	407.82	Rft	1,338.07	Ru.m
S-758	P.E Pipes (PN 16) 90mm e/d	584.99	Rft	1,919.34	Ru.m
S-759	P.E Pipes (PN 8) 110mm e/d	500.41	Rft	1,641.83	Ru.m
S-760	P.E Pipes (PN 8) 125mm e/d	637.57	Rft	2,091.85	Ru.m
S-761	P.E Pipes (PN 8) 160mm e/d	1,043.56	Rft	3,423.92	Ru.m
S-762	P.E Pipes (PN 8) 180mm e/d	1,319.48	Rft	4,329.21	Ru.m
S-763	P.E Pipes (PN 8) 200mm e/d	1,627.17	Rft	5,338.76	Ru.m
S-764	P.E Pipes (PN 8) 250mm e/d	2,512.31	Rft	8,242.90	Ru.m
S-765	P.E Pipes (PN 8) 90mm e/d	336.50	Rft	1,104.05	Ru.m

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Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-766	P.E Pipes((PN 16)) 20mm e/d	30.86	Rft	101.25	Ru.m
S-767	P.E Pipes(PN 8) 75mm e/d	234.54	Rft	769.54	Ru.m
S-768	PE. End Cap 110x110mm	15,937.50	Each	15,937.50	Each
S-769	PE. End Cap 20x20mm	105.00	Each	105.00	Each
S-770	PE. End Cap 25x25mm	135.00	Each	135.00	Each
S-771	PE. End Cap 32x32mm	202.50	Each	202.50	Each
S-772	PE. End Cap 40x40mm	375.00	Each	375.00	Each
S-773	PE. End Cap 50x50mm	712.50	Each	712.50	Each
S-774	PE. End Cap 63x63mm	731.25	Each	731.25	Each
S-775	PE. End Cap 90x90mm	3,468.75	Each	3,468.75	Each
S-776	PE. Equal Bend 20x20mm	228.75	Each	228.75	Each
S-777	PE. Equal Bend 25x25mm	258.75	Each	258.75	Each
S-778	PE. Equal Bend 32x32mm	360.00	Each	360.00	Each
S-779	PE. Equal Bend 40x40mm	918.75	Each	918.75	Each
S-780	PE. Equal Bend 50x50mm	1,372.50	Each	1,372.50	Each
S-781	PE. Equal Bend 63x63mm	1,856.25	Each	1,856.25	Each
S-782	PE. Equal Bend 90x90mm	7,687.50	Each	7,687.50	Each
S-783	PE. Equal Tee 20x20mm	255.00	Each	255.00	Each
S-784	PE. Equal Tee 25x25mm	363.75	Each	363.75	Each
S-785	PE. Equal Tee 32x32mm	491.25	Each	491.25	Each
S-786	PE. Equal Tee 40x40mm	1,031.25	Each	1,031.25	Each
S-787	PE. Equal Tee 50x50mm	1,706.25	Each	1,706.25	Each
S-788	PE. Equal Tee 63x63mm	3,093.75	Each	3,093.75	Each
S-789	PE. Equal Tee 90x90mm	10,312.50	Each	10,312.50	Each
S-790	PE. Female Bend 20mm x 1/2"	172.50	Each	172.50	Each
S-791	PE. Female Bend 20mm x3/4"	172.50	Each	172.50	Each
S-792	PE. Female Bend 25mm x 1"	195.00	Each	195.00	Each
S-793	PE. Female Bend 25mm x 1/2"	195.00	Each	195.00	Each
S-794	PE. Female Bend 25mm x 3/4"	195.00	Each	195.00	Each
S-795	PE. Female Bend 32mm x 1"	247.50	Each	247.50	Each
S-796	PE. Female Bend 32mm x 3/4"	247.50	Each	247.50	Each
S-797	PE. Female Bend 40mm x 1"	656.25	Each	656.25	Each
S-798	PE. Female Bend 40mm x1- 1/2"	656.25	Each	656.25	Each
S-799	PE. Female Bend 50mm x 1-1/2"	1,068.75	Each	1,068.75	Each
S-800	PE. Female Bend 50mm x1-1/4"	1,068.75	Each	1,068.75	Each
S-801	PE. Female Bend 63mm x 2"	1,537.50	Each	1,537.50	Each
S-802	PE. Female Bend 90mm x 3"	7,312.50	Each	7,312.50	Each
S-803	PE. Female Tee 20mm x 1/2"	258.75	Each	258.75	Each
S-804	PE. Female Tee 20mm x3/4"	258.75	Each	258.75	Each
S-805	PE. Female Tee 25mm x 1"	315.00	Each	315.00	Each
S-806	PE. Female Tee 25mm x 1/2"	315.00	Each	315.00	Each
S-807	PE. Female Tee 25mm x 3/4"	315.00	Each	315.00	Each
S-808	PE. Female Tee 32mm x 1"	435.00	Each	435.00	Each
S-809	PE. Female Tee 32mm x 3/4"	435.00	Each	435.00	Each
S-810	PE. Female Tee 40mm x 1"	843.75	Each	843.75	Each
S-811	PE. Female Tee 40mm x1- 1/2"	843.75	Each	843.75	Each
S-812	PE. Female Tee 50mm x 1-1/2"	1,668.75	Each	1,668.75	Each
S-813	PE. Female Tee 50mm x1-1/4"	1,668.75	Each	1,668.75	Each
S-814	PE. Female Tee 63mm x 2"	2,343.75	Each	2,343.75	Each

Sub-Head Code-133

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-815	PE. Female Tee 90mm x 3"	9,843.75	Each	9,843.75	Each
S-816	PE. Female Threaded Adopter (PE. FTA) 20mm x 1/2"	138.75	Each	138.75	Each
S-817	PE. Female Threaded Adopter (PE. FTA) 20mm x 3/4"	138.75	Each	138.75	Each
S-818	PE. Female Threaded Adopter (PE. FTA) 25mm x 1"	161.25	Each	161.25	Each
S-819	PE. Female Threaded Adopter (PE. FTA) 25mm x 1/2"	161.25	Each	161.25	Each
S-820	PE. Female Threaded Adopter (PE. FTA) 25mm x 3/4"	161.25	Each	161.25	Each
S-821	PE. Female Threaded Adopter (PE. FTA) 32mm x 1"	255.00	Each	255.00	Each
S-822	PE. Female Threaded Adopter (PE. FTA) 32mm x 3/4"	255.00	Each	255.00	Each
S-823	PE. Female Threaded Adopter (PE. FTA) 40mm x 1-1/2"	731.25	Each	731.25	Each
S-824	PE. Female Threaded Adopter (PE. FTA) 40mm x 1"	731.25	Each	731.25	Each
S-825	PE. Female Threaded Adopter (PE. FTA) 50mm x 1-1/2"	918.75	Each	918.75	Each
S-826	PE. Female Threaded Adopter (PE. FTA) 50mm x 1-1/4"	918.75	Each	918.75	Each
S-827	PE. Female Threaded Adopter (PE. FTA) 63mm x 2"	1,312.50	Each	1,312.50	Each
S-828	PE. Female Threaded Adopter (PE. FTA) 90mm x 3"	5,437.50	Each	5,437.50	Each
S-829	PE. Male Bend 20mm x 1/2"	172.50	Each	172.50	Each
S-830	PE. Male Bend 20mm x 3/4"	172.50	Each	172.50	Each
S-831	PE. Male Bend 25mm x 1"	195.00	Each	195.00	Each
S-832	PE. Male Bend 25mm x 1/2"	195.00	Each	195.00	Each
S-833	PE. Male Bend 25mm x 3/4"	195.00	Each	195.00	Each
S-834	PE. Male Bend 32mm x 1"	247.50	Each	247.50	Each
S-835	PE. Male Bend 32mm x 3/4"	247.50	Each	247.50	Each
S-836	PE. Male Bend 40mm x 1- 1/2"	656.25	Each	656.25	Each
S-837	PE. Male Bend 40mm x 1"	656.25	Each	656.25	Each
S-838	PE. Male Bend 50mm x 1-1/2"	1,068.75	Each	1,068.75	Each
S-839	PE. Male Bend 50mm x 1-1/4"	1,068.75	Each	1,068.75	Each
S-840	PE. Male Bend 63mm x 2"	1,537.50	Each	1,537.50	Each
S-841	PE. Male Bend 90mm x 3"	7,312.50	Each	7,312.50	Each
S-842	PE. Male Tee 20mm x 1/2"	258.75	Each	258.75	Each
S-843	PE. Male Tee 20mm x3/4"	258.75	Each	258.75	Each
S-844	PE. Male Tee 25mm x 1"	315.00	Each	315.00	Each
S-845	PE. Male Tee 25mm x 1/2"	315.00	Each	315.00	Each
S-846	PE. Male Tee 25mm x 3/4"	315.00	Each	315.00	Each
S-847	PE. Male Tee 32mm x 1"	435.00	Each	435.00	Each
S-848	PE. Male Tee 32mm x 3/4"	435.00	Each	435.00	Each
S-849	PE. Male Tee 40mm x 1"	843.75	Each	843.75	Each
S-850	PE. Male Tee 40mm x1- 1/2"	843.75	Each	843.75	Each
S-851	PE. Male Tee 50mm x 1-1/2"	1,668.75	Each	1,668.75	Each

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-852	PE. Male Tee 50mm x1-1/4"	1,668.75	Each	1,668.75	Each
S-853	PE. Male Tee 63mm x 2"	2,343.75	Each	2,343.75	Each
S-854	PE. Male Tee 90mm x 3"	9,843.75	Each	9,843.75	Each
S-855	PE. Male Threaded Adopter (PE. MTA) 110mm x 4"	17,062.50	Each	17,062.50	Each
S-856	PE. Male Threaded Adopter (PE. MTA) 20mm x 1/2"	108.75	Each	108.75	Each
S-857	PE. Male Threaded Adopter (PE. MTA) 20mm x3/4"	108.75	Each	108.75	Each
S-858	PE. Male Threaded Adopter (PE. MTA) 25mm x 1"	123.75	Each	123.75	Each
S-859	PE. Male Threaded Adopter (PE. MTA) 25mm x 1/2"	123.75	Each	123.75	Each
S-860	PE. Male Threaded Adopter (PE. MTA) 25mm x 3/4"	123.75	Each	123.75	Each
S-861	PE. Male Threaded Adopter (PE. MTA) 32mm x 1"	161.25	Each	161.25	Each
S-862	PE. Male Threaded Adopter (PE. MTA) 32mm x 1/2"	161.25	Each	161.25	Each
S-863	PE. Male Threaded Adopter (PE. MTA) 32mm x 3/4"	161.25	Each	161.25	Each
S-864	PE. Male Threaded Adopter (PE. MTA) 40mm x 1"	600.00	Each	600.00	Each
S-865	PE. Male Threaded Adopter (PE. MTA) 40mm x1-1/2"	600.00	Each	600.00	Each
S-866	PE. Male Threaded Adopter (PE. MTA) 50mm x 1-1/2"	641.25	Each	641.25	Each
S-867	PE. Male Threaded Adopter (PE. MTA) 50mm x1-1/4"	641.25	Each	641.25	Each
S-868	PE. Male Threaded Adopter (PE. MTA) 63mm x 2"	828.75	Each	828.75	Each
S-869	PE. Male Threaded Adopter (PE. MTA) 90mm x 3"	4,312.50	Each	4,312.50	Each
S-870	PE. Reducing Coupler 110x75mm	23,062.50	Each	23,062.50	Each
S-871	PE. Reducing Coupler 25x20mm	247.50	Each	247.50	Each
S-872	PE. Reducing Coupler 32x20mm	352.50	Each	352.50	Each
S-873	PE. Reducing Coupler 32x25mm	405.00	Each	405.00	Each
S-874	PE. Reducing Coupler 40x25mm	1,256.25	Each	1,256.25	Each
S-875	PE. Reducing Coupler 40x32mm	1,256.25	Each	1,256.25	Each
S-876	PE. Reducing Coupler 50x25mm	1,443.75	Each	1,443.75	Each
S-877	PE. Reducing Coupler 50x32mm	1,443.75	Each	1,443.75	Each
S-878	PE. Reducing Coupler 50x40mm	1,443.75	Each	1,443.75	Each
S-879	PE. Reducing Coupler 63x32mm	1,725.00	Each	1,725.00	Each
S-880	PE. Reducing Coupler 63x40mm	1,725.00	Each	1,725.00	Each
S-881	PE. Reducing Coupler 63x50mm	1,725.00	Each	1,725.00	Each
S-882	PE. Reducing Coupler 90x63mm	6,187.50	Each	6,187.50	Each
S-883	PE. Reducing Tee 25x20mm	247.50	Each	247.50	Each
S-884	PE. Reducing Tee 32x20mm	352.50	Each	352.50	Each
S-885	PE. Reducing Tee 32x25mm	405.00	Each	405.00	Each
S-886	PE. Reducing Tee 40x25mm	1,256.25	Each	1,256.25	Each
S-887	PE. Reducing Tee 40x32mm	1,256.25	Each	1,256.25	Each
S-888	PE. Reducing Tee 50x25mm	1,443.75	Each	1,443.75	Each
S-889	PE. Reducing Tee 50x32mm	1,443.75	Each	1,443.75	Each
S-890	PE. Reducing Tee 50x40mm	1,443.75	Each	1,443.75	Each
S-891	PE. Reducing Tee 63x32mm	1,725.00	Each	1,725.00	Each

Sub-Head Code-133

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-892	PE. Reducing Tee 63x40mm	1,725.00	Each	1,725.00	Each
S-893	PE. Reducing Tee 63x50mm	1,725.00	Each	1,725.00	Each
S-894	PE. Reducing Tee 90x63mm	6,187.50	Each	6,187.50	Each
S-895	PE. Saddle Clamp 110mm x 1".	1,443.75	Each	1,443.75	Each
S-896	PE. Saddle Clamp 110mm x 2".	1,443.75	Each	1,443.75	Each
S-897	PE. Saddle Clamp 110mm x 3/4".	1,443.75	Each	1,443.75	Each
S-898	PE. Saddle Clamp 110mm x1-1/ 4".	1,443.75	Each	1,443.75	Each
S-899	PE. Saddle Clamp 125mm x 1".	2,231.25	Each	2,231.25	Each
S-900	PE. Saddle Clamp 125mm x 2".	2,231.25	Each	2,231.25	Each
S-901	PE. Saddle Clamp 125mm x 3/4".	2,231.25	Each	2,231.25	Each
S-902	PE. Saddle Clamp 160mm x 1".	5,820.00	Each	5,820.00	Each
S-903	PE. Saddle Clamp 160mm x 1-1/2".	5,820.00	Each	5,820.00	Each
S-904	PE. Saddle Clamp 160mm x 2".	5,820.00	Each	5,820.00	Each
S-905	PE. Saddle Clamp 160mm x 3/4".	5,820.00	Each	5,820.00	Each
S-906	PE. Saddle Clamp 180mm x 1".	5,936.25	Each	5,936.25	Each
S-907	PE. Saddle Clamp 180mm x 2".	5,936.25	Each	5,936.25	Each
S-908	PE. Saddle Clamp 180mm x 3/4".	5,936.25	Each	5,936.25	Each
S-909	PE. Saddle Clamp 225mm x 1".	7,687.50	Each	7,687.50	Each
S-910	PE. Saddle Clamp 225mm x 1-1/2".	7,687.50	Each	7,687.50	Each
S-911	PE. Saddle Clamp 225mm x 2".	7,687.50	Each	7,687.50	Each
S-912	PE. Saddle Clamp 225mm x 3".	7,687.50	Each	7,687.50	Each
S-913	PE. Saddle Clamp 225mm x 3/4".	7,687.50	Each	7,687.50	Each
S-914	PE. Saddle Clamp 25mm x 1/2".	375.00	Each	375.00	Each
S-915	PE. Saddle Clamp 25mm x 3/4".	375.00	Each	375.00	Each
S-916	PE. Saddle Clamp 32mm x 1".	461.25	Each	461.25	Each
S-917	PE. Saddle Clamp 32mm x 3/4".	461.25	Each	461.25	Each
S-918	PE. Saddle Clamp 40mm x 1/2"	525.00	Each	525.00	Each
S-919	PE. Saddle Clamp 40mm x3/4"	525.00	Each	525.00	Each
S-920	PE. Saddle Clamp 50mm x 1"	630.00	Each	630.00	Each
S-921	PE. Saddle Clamp 50mm x 3/4"	630.00	Each	630.00	Each
S-922	PE. Saddle Clamp 50mm x1/2"	588.75	Each	588.75	Each
S-923	PE. Saddle Clamp 63mm x 1"	630.00	Each	630.00	Each
S-924	PE. Saddle Clamp 63mm x3/4"	630.00	Each	630.00	Each
S-925	PE. Saddle Clamp 90mm x 1".	1,200.00	Each	1,200.00	Each
S-926	PE. Saddle Clamp 90mm x 1-1/4".	1,200.00	Each	1,200.00	Each
S-927	PE. Saddle Clamp 90mm x 2".	1,200.00	Each	1,200.00	Each
S-928	PE. Saddle Clamp 90mm x 3/4".	1,200.00	Each	1,200.00	Each
S-929	PE. Straight Coupler 110x110mm	20,587.50	Each	20,587.50	Each
S-930	PE. Straight Coupler 20 x 20mm	195.00	Each	195.00	Each
S-931	PE. Straight Coupler 25x25mm	247.50	Each	247.50	Each
S-932	PE. Straight Coupler 32x32mm	311.25	Each	311.25	Each
S-933	PE. Straight Coupler 40x40mm	881.25	Each	881.25	Each
S-934	PE. Straight Coupler 50x50mm	1,050.00	Each	1,050.00	Each
S-935	PE. Straight Coupler 63x63mm	1,443.75	Each	1,443.75	Each
S-936	PE. Straight Coupler 90x90mm	5,962.50	Each	5,962.50	Each
	uPVC SOIL, WASTE AND VENT PIPE & FITTINGS				
S-937	uPVC Mutli Floor Trape.	774.40	Each	774.40	Each
S-938	uPVC Nihani Trap	1,488.68	Each	1,488.68	Each

Sub-Head Code-133

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-939	uPVC Pipe Clamp 110mm dia	1,044.89	Each	1,044.89	Each
S-940	uPVC Pipe Clamp 75mm dia.	1,040.45	Each	1,040.45	Each
S-941	uPVC Pipe Type 'B' 110mm dia.	1,311.15	Rft.	4,301.88	Ru.m
S-942	uPVC Pipe Type 'B' 160mm dia.	1,557.93	Rft.	5,111.55	Ru.m
S-943	uPVC Pipe Type 'B' 40mm dia.	1,113.05	Rft.	3,651.92	Ru.m
S-944	uPVC Pipe Type 'B' 50mm dia.	1,142.33	Rft.	3,747.97	Ru.m
S-945	uPVC Pipe Type 'B' 75mm dia.	1,198.79	Rft.	3,933.22	Ru.m
S-946	uPVC Reducing bush 40x50 mm dia.	1,077.99	Each	1,077.99	Each
S-947	uPVC Vent Cowel 110mm dia.	1,087.69	Each	1,087.69	Each
S-948	uPVC Vent Cowel 75mm dia	1,072.38	Each	1,072.38	Each
S-949	uPVC W.C. Elbow	1,575.80	Each	1,575.80	Each
S-950	uPVC W.C. P-Trape Complete With ring 125x110mm	1,896.53	Each	1,896.53	Each
S-951	uPVC "Y" Double 110x110x110 mm dia.	3,062.24	Each	3,062.24	Each
S-952	uPVC "Y" Double 75x75x75 mm dia.	1,815.88	Each	1,815.88	Each
S-953	uPVC "Y" single 110x110 mm dia.	1,492.80	Each	1,492.80	Each
S-954	uPVC "Y" single 160x160 mm dia.	2,568.25	Each	2,568.25	Each
S-955	uPVC "Y" single 40x40 mm dia.	1,120.70	Each	1,120.70	Each
S-956	uPVC "Y" single 50x50 mm dia.	1,188.04	Each	1,188.04	Each
S-957	uPVC "Y" single 75x75 mm dia.	1,377.18	Each	1,377.18	Each
S-958	uPVC 45 Degree Elbow 110mm dia.	1,261.81	Each	1,261.81	Each
S-959	uPVC 45 Degree Elbow 160mm dia.	2,062.13	Each	2,062.13	Each
S-960	uPVC 45 Degree Elbow 40mm dia.	1,069.15	Each	1,069.15	Each
S-961	uPVC 45 Degree Elbow 50mm dia.	1,103.86	Each	1,103.86	Each
S-962	uPVC 45 Degree Elbow 75mm dia.	1,184.25	Each	1,184.25	Each
S-963	uPVC access "Y" single 110x110 mm dia.	1,584.36	Each	1,584.36	Each
S-964	uPVC access "Y" single 75x75 mm dia.	1,432.03	Each	1,432.03	Each
S-965	uPVC Access Elbow 110mm dia.	1,514.59	Each	1,514.59	Each
S-966	uPVC Access Elbow 75mm dia.	1,312.23	Each	1,312.23	Each
S-967	uPVC Access PIPE 110mm dia.	1,802.60	Each	1,802.60	Each
S-968	uPVC Access PIPE 160mm dia.	2,005.88	Each	2,005.88	Each
S-969	uPVC Access PIPE 75mm dia.	1,795.90	Each	1,795.90	Each
S-970	uPVC access Tee 75 mm dia.	1,438.03	Each	1,438.03	Each
S-971	uPVC Double socket 110mm dia.	1,205.21	Each	1,205.21	Each
S-972	uPVC Double socket 160mm dia.	1,555.30	Each	1,555.30	Each
S-973	uPVC Double socket 40mm dia.	1,069.10	Each	1,069.10	Each
S-974	uPVC Double socket 50mm dia.	1,085.33	Each	1,085.33	Each
S-975	uPVC Double socket 75mm dia.	1,145.05	Each	1,145.05	Each
S-976	uPVC Eccentric Reducer 110x50 mm dia.	1,206.95	Each	1,206.95	Each
S-977	uPVC Eccentric Reducer 110x75 mm dia.	1,226.44	Each	1,226.44	Each
S-978	uPVC Eccentric Reducer 160x110 mm dia.	1,570.00	Each	1,570.00	Each
S-979	uPVC Eccentric Reducer 40x50 mm dia.	1,119.69	Each	1,119.69	Each
S-980	uPVC Eccentric Reducer 50x75 mm dia.	1,150.05	Each	1,150.05	Each
S-981	uPVC End Cap 110mm dia.	1,168.45	Each	1,168.45	Each
S-982	uPVC End Cap 160mm dia.	1,226.00	Each	1,226.00	Each
S-983	uPVC End Cap 50mm dia.	1,111.73	Each	1,111.73	Each
S-984	uPVC End Cap 75mm dia.	1,159.49	Each	1,159.49	Each
S-985	uPVC Equal Tee 110mm dia.	1,475.86	Each	1,475.86	Each
S-986	uPVC Equal Tee 40mm dia.	1,146.26	Each	1,146.26	Each

Sub-Head Code-133

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-987	uPVC Equal Tee 50mm dia.	1,163.58	Each	1,163.58	Each
S-988	uPVC Equal Tee 75mm dia.	1,454.94	Each	1,454.94	Each
S-989	uPVC Plain Elbow 110mm dia.	1,386.34	Each	1,386.34	Each
S-990	uPVC Plain Elbow 160mm dia.	2,452.00	Each	2,452.00	Each
S-991	uPVC plain Elbow 40mm dia.	1,112.11	Each	1,112.11	Each
S-992	uPVC Plain Elbow 50mm dia.	1,132.69	Each	1,132.69	Each
S-993	uPVC Plain Elbow 75mm dia.	1,296.81	Each	1,296.81	Each
S-994	uPVC Reducing "Y" single 110x75 mm dia.	1,613.19	Each	1,613.19	Each
S-995	uPVC Reducing "Y" single 160x110 mm dia.	2,652.75	Each	2,652.75	Each
S-996	uPVC Reducing "Y" single 160x75 mm dia.	2,610.25	Each	2,610.25	Each
S-997	uPVC Reducing Tee 110 mm dia.	1,618.36	Each	1,618.36	Each
S-998	uPVC Reducing Tee 110x75mm dia.	1,624.80	Each	1,624.80	Each
S-999	uPVC Reducing Tee 160x110mm dia	1,625.80	Each	1,625.80	Each
S-1000	uPVC Top Tile(Jali with frame)	1,182.01	Each	1,182.01	Each
	MISCELLANEOUS ITEMS				
S-1001	Ball valve 1" dia (25 mm) with handle.	1,200.00	Each	1,200.00	Each
S-1002	Ball valve 1/2" dia (15 mm) with handle.	550.00	Each	550.00	Each
S-1003	Ball valve 1-1/2" dia (40 mm) with handle.	2,200.00	Each	2,200.00	Each
S-1004	Ball valve 2" dia (50 mm) with handle.	4,000.00	Each	4,000.00	Each
S-1005	Ball valve 3/4" dia (20 mm) with handle.	800.00	Each	800.00	Each
S-1006	Bath tub made of Fiber Glass of any colour and design 66"x28"x23" (1680x711x584mm)	12,000.00	Each	12,000.00	Each
S-1007	Bath tub made of Fiber Glass ofany colour and design 72"x28"x23" (1829x711x584mm)	15,000.00	Each	15,000.00	Each
S-1008	Bath tub made of Fiber Glass with accrelic coating of any colour and design 66"x28"x23" (1680x711x584mm)	12,500.00	Each	12,500.00	Each
S-1009	Bath room accessories set of 6 pieces (master 2000 A)	8,800.00	Each	8,800.00	Each
S-1010	Bathroom Accessories Set of 6 pieces consist of one Shelf, one Towel rod, one Towel ring, one Soap dish, one Tooth Brush Holder, one Tissue Paper holder, one Double hook:	6,000.00	Set	6,000.00	Set
S-1011	Bolt kit for for Wash hand basin / Commode	250.00	Set	250.00	Set
S-1012	Brass Oxidized bolts for Wash hand Basin	1,000.00	Set	1,000.00	Set
S-1013	C.I Pipe (Sand Casted) 2" dia (50 mm)	232.25	Rft.	762.00	Ru.m
S-1014	C.I Pipe (Sand Casted) 3" dia (75 mm)	273.12	Rft.	896.11	Ru.m
S-1015	C.I Pipe (Sand Casted) 4" dia (100 mm)	318.64	Rft.	1,045.46	Ru.m
S-1016.	C.I Pipe (sand Casted) 6" dia (150 mm)	925.73	Rft.	3,037.33	Ru.m
S-1017	C.I. Manhole cover.	105.00	LBS	200.00	Kg
S-1018	CP Bibcock with nozzel 90 deg.	1,250.00	Each	1,250.00	Each
S-1019	CP Bib cock 45 deg.	950.00	Each	950.00	Each
S-1020	CP bib cock washer.	25.00	P.Doz.	25.00	P.Doz.
S-1021	CP Bidet Mixer with Pop up waste Complete.	7,900.00	Each	7,900.00	Each
S-1022	CP Common Bath Mixer wall type with Telephone shower Complete	10,500.00	Each	10,500.00	Each
S-1023	CP consealed stopcock 1/2" dia.	850.00	Each	850.00	Each
S-1024	CP floor trap jali 4" dia with hinges.	250.00	Each	250.00	Each
S-1025	CP floor trap jali 4" square or round.	250.00	Each	250.00	Each
S-1026	CP floor trap jali 6" dia with hinges.	450.00	Each	450.00	Each

Sub-Head Code-133

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-1026a	Floor waste 6" x 6" Stainless Steel Jali	850.00	Each	850.00	Each
S-1027	CP Head for Bibcock (Knob).	250.00	Each	250.00	Each
S-1028	CP Long Bibcock 45 deg.	1,500.00	Each	1,500.00	Each
S-1029	CP Long Bibcock 90 deg.	1,500.00	Each	1,500.00	Each
S-1030	CP Muslim Bibcock with out muslim shower.	1,950.00	Each	1,950.00	Each
S-1031	CP pipe connection 1/4" dia.	300.00	Each	300.00	Each
S-1032	CP tee stopcock 1/2" dia .	980.00	Each	980.00	Each
S-1033	Cristal knob for mixers and cocks.	180.00	Each	180.00	Each
S-1034	Earthen ware Glazed Corner Basin Standard Size (White/light Colour)	3,500.00	Each	3,500.00	Each
S-1035	Earthen ware Glazed Vanity Basin Standard Size (White/light Colour)	6,000.00	Each	6,000.00	Each
S-1035a	Earthen ware glazed vanity basin (Porta or equivelent)	10,000.00	Each	10,000.00	Each
S-1036	Flushing cistern washer (Golden).	80.00	Each	80.00	Each
S-1037	Flushing Cistren Golden PVC with internal fitting (Karachi).	350.00	Each	350.00	Each
S-1038	Flushing cistren Master Slim line PVC with complete fittings	1,500.00	Each	1,500.00	Each
S-1039	Looking Mirror made of belgium glass with plastic frame of standard size.	2,200.00	Each	2,200.00	Each
S-1040	Plastic (PVC) W.C seat cover (ICL/IFO).	950.00	Each	950.00	Each
S-1041	Plastic (PVC) W.C seat cover Master(Special)	950.00	Each	950.00	Each
S-1042	Plastic shelf of standard size of any colour and design.	850.00	Each	850.00	Each
S-1043	PVC Flexible Pipe for Hand shower.	600.00	Each	600.00	Each
S-1044	PVC Hand shower with pvc Flexible pipe & Bracket.	1,000.00	Each	1,000.00	Each
S-1045	PVC Muslim shower with one meter flaxible pipe.	1,200.00	Each	1,200.00	Each
S-1046	PVC Muslim shower with out pipe.	900.00	Each	900.00	Each
S-1047	PVC Solution raping tape for G.I.Pipe. 2" wide.	180.00	Each	180.00	Each
S-1048	PVC Solution raping tape for G.I.Pipe.1-1/ 2" wide.	180.00	Each	180.00	Each
S-1049	Bath room accessories set of 7 pieces (master 2000 A)	9,000.00	Set	9,000.00	Set
S-1050	Bath room accessories set of 7 pieces (master 101)	9,500.00	Set	9,500.00	Set
S-1051	Royal Bathroom Accessories Set of 7 pieces consist of one Cosmetic shelf, one Towel Rod with bracket,one tooth brush holder with Glass and Cover, one Tissue Paper holder, one soap dish,one Double hook, one towel Ring:	7,500.00	Set	7,500.00	Set
S-1052	Royal Cosmetic Shelf.	640.00	Each	640.00	Each
S-1053	Royal Double Hook	400.00	Each	400.00	Each
S-1054	Royal Glass Brush holder.	500.00	Each	500.00	Each
S-1055	Royal Paper Holder.	490.00	Each	490.00	Each
S-1056	Royal Soap Dish.	550.00	Each	550.00	Each
S-1057	Royal Towel Ring.	550.00	Each	550.00	Each
S-1058	Royal Towel Rod with Bracket.	700.00	Each	700.00	Each
S-1059	Shower Tray made of Fiber Glass of any colour and design 31" x 31" (787x787mm)	5,200.00	Each	5,200.00	Each
S-1060	Shower Tray made of Fiber Glass with accrelic coating of any colour and design 31" x 31" (787x787mm)	6,500.00	Each	6,500.00	Each

Sub-Head Code-133

Code No.	Description of Material	FPS Rate (Rs.)	Unit	SI Rate (Rs.)	Unit
S-1061	Stainless steel sink 60"x20" (1524x508mm) pak made	18,900.00	Each	18,900.00	Each
S-1062	Sufaida (1 tin = 1 Lbs) / Lead.	190.00	P.Tin	190.00	P.Tin
S-1063	Wall shower CP Brass 3 nobs complete with moveable shower head	6,500.00	Each	6,500.00	Each
S-1064	Washer for Brass bib cock.	25.00	P.Doz.	25.00	Each
S-1065	White Glazed Earthen ware Bidet.	6,600.00	Each	6,600.00	Each
S-1066	White Glazed Earthen ware Urinal.	4,000.00	Each	4,000.00	Each

CARTAGE OF MATERIALS BY MECHANICAL TRANSPORT

Code-134

CARRIAGE OF MATERIALS (GENERAL)

Specifications

1. Carriage of materials shall include the whole procedure of loading to the carrier transport and unloading at the required site.
2. Packing shall be required in a satisfactory manner for all materials like glass, sanitary wares, tiles and facing bricks and other fragile materials and shall be paid separately unless otherwise specified.
3. Whatever, may be the mode of transport, the contractor under taking the carriage of materials, shall be responsible for the safe loading, unloading and delivery to the specified site and stacking as per direction of the Engineer-in-Charge.
4. Carriage shall be paid for by weight, by linear measurements, by Volume, by Numbers or as specified.

PAKISTAN PUBLIC WORKS DEPARTMENT

CARTAGE OF MATERIAL BY MECHANICAL TRANSPORT

Sub-Head Code-134

S. No.	Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
1		Cartage of bricks including lodading, unloading and stacking etc. at site:				
	M001	1/2 mile (0.80 km) lead or part thereof.	332.98	% Nos.	332.98	% Nos.
	M001	1 mile (1.6 km) lead.	383.79	% Nos.	383.79	% Nos.
	M001	2 miles (3.2 km) lead.	483.37	% Nos.	483.37	% Nos.
	M001	3 miles (4.8 km) lead.	576.78	% Nos.	576.78	% Nos.
	M001	Extra per mile (1.6 km) above 3 miles to 6 miles (4.8 km to 9.6 km) of lead.	84.72	% Nos.	84.72	% Nos.
	M001	Extra per mile (1.6 km) above 6 miles to 10 miles (9.6 km to 16 km) of lead.	72.95	% Nos.	72.95	% Nos.
	M001	Extra per mile (1.6 km) above 10 miles to 15 miles (16 km to 24 km) of lead.	63.04	% Nos.	63.04	% Nos.
	M001	Extra per mile (1.6 km) above 15 miles to 20 miles (24 km to 32 km) of lead.	56.32	% Nos.	56.32	% Nos.
	M001	Extra per mile (1.6 km) above 20 miles (32 km) of lead.	-	% Nos.	0.00	% Nos.
2		Cartage of sand, bajri, lime, surkhi, murum, manure, earth, building rubbish including loading, unloading and stacking etc. at site:				
	M002	1/2 mile (0.80 km) lead or part thereof.	332.98	% Cft	117.66	Cu.m.
	M002	1 mile (1.6 km) lead.	383.79	% Cft	135.61	Cu.m.
	M002	2 miles (3.2 km) lead.	483.37	% Cft	170.80	Cu.m.
	M002	3 miles (4.8 km) lead.	576.78	% Cft	203.81	Cu.m.
	M002	Extra per mile (1.6 km) above 3 miles to 6 miles (4.8 km to 9.6 km) of lead.	84.72	% Cft	29.94	Cu.m.
	M002	Extra per mile (1.6 km) above 6 miles to 10 miles (9.6 km to 16 km) of lead.	72.95	% Cft	25.78	Cu.m.
	M002	Extra per mile (1.6 km) above 10 miles to 15 miles (16 km to 24 km) of lead.	63.04	% Cft	22.28	Cu.m.
	M002	Extra per mile (1.6 km) above 15 miles to 20 miles (24 km to 32 km) of lead.	56.32	% Cft	19.90	Cu.m.
	M002	Extra per mile (1.6 km) above 20 miles (32 km) of lead.	-	% Cft	0.00	Cu.m.
3		Cartage of stone, brickbats, ballast, shingle, boulders & C.C. block inclding loading, unloading and stacking etc. at site:				
	M003	1/2 mile (0.80 km) lead or part thereof.	332.98	% Cft	117.66	Cu.m.
	M003	1 mile (1.6 km) lead.	383.79	% Cft	135.61	Cu.m.
	M003	2 miles (3.2 km) lead.	483.37	% Cft	170.80	Cu.m.
	M003	3 miles (4.8 km) lead.	576.78	% Cft	203.81	Cu.m.
	M003	Extra per mile (1.6 km) above 3 miles to 6 miles (4.8 km to 9.6 km) of lead.	84.72	% Cft	29.94	Cu.m.
	M003	Extra per mile (1.6 km) above 6 miles to 10 miles (9.6 km to 16 km) of lead.	72.95	% Cft	25.78	Cu.m.

CARTAGE OF MATERIAL BY MECHANICAL TRANSPORT

Sub-Head Code-134

S. No.	Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
	M003	Extra per mile (1.6 km) above 10 miles to 15 miles (16 km to 24 km) of lead.	63.04	% Cft	22.28	Cu.m.
	M003	Extra per mile (1.6 km) above 15 miles to 20 miles (24 km to 32 km) of lead.	56.32	% Cft	19.90	Cu.m.
	M003	Extra per mile (1.6 km) above 20 miles (32 km) of lead.	-	% Cft	0.00	Cu.m.
4		Cartage of cement, steet C.I. & G.I. pipes and aluminium sheets and other heavy materials including loading, unloading and stacking etc. at site:				
	M004	1/2 mile (0.80 km) lead or part thereof.	133.19	Ton	131.06	Tonne
	M004	1 mile (1.6 km) lead.	153.51	Ton	151.06	Tonne
	M004	2 miles (3.2 km) lead.	193.35	Ton	190.25	Tonne
	M004	3 miles (4.8 km) lead.	230.71	Ton	227.02	Tonne
	M004	Extra per mile (1.6 km) above 3 miles to 6 miles (4.8 km to 9.6 km) of lead.	33.89	Ton	33.35	Tonne
	M004	Extra per mile (1.6 km) above 6 miles to 10 miles (9.6 km to 16 km) of lead.	29.18	Ton	28.71	Tonne
	M004	Extra per mile (1.6 km) above 10 miles to 15 miles (16 km to 24 km) of lead.	25.22	Ton	24.81	Tonne
	M004	Extra per mile (1.6 km) above 15 miles to 20 miles (24 km to 32 km) of lead.	22.53	Ton	22.17	Tonne
	M004	Extra per mile (1.6 km) above 20 miles (32 km) of lead.	-	Ton	0.00	Tonne
5		Cartage of dilicate materials, glass panes, doors, windows, fittings, paints, varnishes etc. including loading, unloading and stacking etc. at site:				
	M005	1/2 mile (0.80 km) lead or part thereof.	133.19	Ton	131.06	Tonne
	M005	1 mile (1.6 km) lead.	153.51	Ton	151.06	Tonne
	M005	2 miles (3.2 km) lead.	193.35	Ton	190.25	Tonne
	M005	3 miles (4.8 km) lead.	230.71	Ton	227.02	Tonne
	M005	Extra per mile (1.6 km) above 3 miles to 6 miles (4.8 km to 9.6 km) of lead.	33.89	Ton	33.35	Tonne
	M005	Extra per mile (1.6 km) above 6 miles to 10 miles (9.6 km to 16 km) of lead.	29.18	Ton	28.71	Tonne
	M005	Extra per mile (1.6 km) above 10 miles to 15 miles (16 km to 24 km) of lead.	25.22	Ton	24.81	Tonne
	M005	Extra per mile (1.6 km) above 15 miles to 20 miles (24 km to 32 km) of lead.	22.53	Ton	22.17	Tonne
	M005	Extra per mile (1.6 km) above 20 miles (32 km) of lead.	-	Ton	0.00	Tonne
6		Cartage of timber including loading, unloading and stacking etc. at site:				
	M006	1/2 mile (0.80 km) lead or part thereof.	266.39	% Cft	94.13	Cu.m.
	M006	1 mile (1.6 km) lead.	307.03	% Cft	108.49	Cu.m.
	M006	2 miles (3.2 km) lead.	386.70	% Cft	136.64	Cu.m.

CARTAGE OF MATERIAL BY MECHANICAL TRANSPORT

Sub-Head Code-134

S. No.	Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
	M006	3 miles (4.8 km) lead.	461.43	% Cft	163.05	Cu.m.
	M006	Extra per mile (1.6 km) above 3 miles to 6 miles (4.8 km to 9.6 km) of lead.	67.78	% Cft	23.95	Cu.m.
	M006	Extra per mile (1.6 km) above 6 miles to 10 miles (9.6 km to 16 km) of lead.	58.36	% Cft	20.62	Cu.m.
	M006	Extra per mile (1.6 km) above 10 miles to 15 miles (16 km to 24 km) of lead.	50.43	% Cft	17.82	Cu.m.
	M006	Extra per mile (1.6 km) above 15 miles to 20 miles (24 km to 32 km) of lead.	45.05	% Cft	15.92	Cu.m.
	M006	Extra per mile (1.6 km) above 20 miles (32 km) of lead.	-	% Cft	0.00	Cu.m.
7		Cartage of tar, bitumen etc. including loading, unloading & stacking etc. at site.				
	M007	1/2 mile (0.80 km) lead or part thereof.	133.19	Ton	131.06	Tonne
	M007	1 mile (1.6 km) lead.	153.51	Ton	151.06	Tonne
	M007	2 miles (3.2 km) lead.	193.35	Ton	190.25	Tonne
	M007	3 miles (4.8 km) lead.	230.71	Ton	227.02	Tonne
	M007	Extra per mile (1.6 km) above 3 miles to 6 miles (4.8 km to 9.6 km) of lead.	33.89	Ton	33.35	Tonne
	M007	Extra per mile (1.6 km) above 6 miles to 10 miles (9.6 km to 16 km) of lead.	29.18	Ton	28.71	Tonne
	M007	Extra per mile (1.6 km) above 10 miles to 15 miles (16 km to 24 km) of lead.	25.22	Ton	24.81	Tonne
	M007	Extra per mile (1.6 km) above 15 miles to 20 miles (24 km to 32 km) of lead.	22.53	Ton	22.17	Tonne
	M007	Extra per mile (1.6 km) above 20 miles (32 km) of lead.	-	Ton	0.00	Tonne
8		Cartage of coal including loading, unloading and stacking etc. at site:				
	M008	1/2 mile (0.80 km) lead or part thereof.	133.19	Ton	131.06	Tonne
	M008	1 mile (1.6 km) lead.	153.51	Ton	151.06	Tonne
	M008	2 miles (3.2 km) lead.	193.35	Ton	190.25	Tonne
	M008	3 miles (4.8 km) lead.	230.71	Ton	227.02	Tonne
	M008	Extra per mile (1.6 km) above 3 miles to 6 miles (4.8 km to 9.6 km) of lead.	33.89	Ton	33.35	Tonne
	M008	Extra per mile (1.6 km) above 6 miles to 10 miles (9.6 km to 16 km) of lead.	29.18	Ton	28.71	Tonne
	M008	Extra per mile (1.6 km) above 10 miles to 15 miles (16 km to 24 km) of lead.	25.22	Ton	24.81	Tonne
	M008	Extra per mile (1.6 km) above 15 miles to 20 miles (24 km to 32 km) of lead.	22.53	Ton	22.17	Tonne
	M008	Extra per mile (1.6 km) above 20 miles (32 km) of lead.	-	Ton	0.00	Tonne
9		Cartage of R.C.C. pipes of any class with collars, including loading, unloading and stacking etc. at site:				

CARTAGE OF MATERIAL BY MECHANICAL TRANSPORT

Sub-Head Code-134

S. No.	Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
(a)		4 inches (100 mm)				
	M009	1/2 mile (0.80 km) lead or part thereof.	213.45	% Rft.	7.00	Ru.m.
	M009	1 mile (1.6 km) lead.	246.02	% Rft.	8.07	Ru.m.
	M009	2 miles (3.2 km) lead.	309.85	% Rft.	10.17	Ru.m.
	M009	3 miles (4.8 km) lead.	369.73	% Rft.	12.13	Ru.m.
	M009	Extra per mile (1.6 km) above 3 miles to 6 miles (4.8 km to 9.6 km) of lead.	54.31	% Rft.	1.78	Ru.m.
	M009	Extra per mile (1.6 km) above 6 miles to 10 miles (9.6 km to 16 km) of lead.	46.77	% Rft.	1.53	Ru.m.
	M009	Extra per mile (1.6 km) above 10 miles to 15 miles (16 km to 24 km) of lead.	40.41	% Rft.	1.33	Ru.m.
	M009	Extra per mile (1.6 km) above 15 miles to 20 miles (24 km to 32 km) of lead.	36.10	% Rft.	1.18	Ru.m.
	M009	Extra per mile (1.6 km) above 20 miles (32 km) of lead.	-	% Rft.	0.00	Ru.m.
(b)		6 inches dia: (150 mm)				
	M010	1/2 mile (0.80 km) lead or part thereof.	263.99	% Rft.	8.66	Ru.m.
	M010	1 mile (1.6 km) lead.	304.26	% Rft.	9.98	Ru.m.
	M010	2 miles (3.2 km) lead.	383.21	% Rft.	12.57	Ru.m.
	M010	3 miles (4.8 km) lead.	457.27	% Rft.	15.00	Ru.m.
	M010	Extra per mile (1.6 km) above 3 miles to 6 miles (4.8 km to 9.6 km) of lead.	67.17	% Rft.	2.20	Ru.m.
	M010	Extra per mile (1.6 km) above 6 miles to 10 miles (9.6 km to 16 km) of lead.	57.84	% Rft.	1.90	Ru.m.
	M010	Extra per mile (1.6 km) above 10 miles to 15 miles (16 km to 24 km) of lead.	49.98	% Rft.	1.64	Ru.m.
	M010	Extra per mile (1.6 km) above 15 miles to 20 miles (24 km to 32 km) of lead.	44.65	% Rft.	1.46	Ru.m.
	M010	Extra per mile (1.6 km) above 20 miles (32 km) of lead.	-	% Rft.	0.00	Ru.m.
(c)		9 inches dia (230 mm)				
	M011	1/2 mile (0.80 km) lead or part thereof.	541.43	% Rft.	17.76	Ru.m.
	M011	1 mile (1.6 km) lead.	624.04	% Rft.	20.47	Ru.m.
	M011	2 miles (3.2 km) lead.	785.97	% Rft.	25.79	Ru.m.
	M011	3 miles (4.8 km) lead.	937.86	% Rft.	30.77	Ru.m.
	M011	Extra per mile (1.6 km) above 3 miles to 6 miles (4.8 km to 9.6 km) of lead.	137.76	% Rft.	4.52	Ru.m.
	M011	Extra per mile (1.6 km) above 6 miles to 10 miles (9.6 km to 16 km) of lead.	118.62	% Rft.	3.89	Ru.m.
	M011	Extra per mile (1.6 km) above 10 miles to 15 miles (16 km to 24 km) of lead.	102.50	% Rft.	3.36	Ru.m.

CARTAGE OF MATERIAL BY MECHANICAL TRANSPORT

Sub-Head Code-134

S. No.	Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
	M011	Extra per mile (1.6 km) above 15 miles to 20 miles (24 km to 32 km) of lead.	91.57	% Rft.	3.00	Ru.m.
	M011	Extra per mile (1.6 km) above 20 miles (32 km) of lead.	-	% Rft.	0.00	Ru.m.
(d)		12 inches dia (300 mm)				
	M012	1/2 mile (0.80 km) lead or part thereof.	723.87	% Rft.	23.75	Ru.m.
	M012	1 mile (1.6 km) lead.	834.32	% Rft.	27.37	Ru.m.
	M012	2 miles (3.2 km) lead.	1,050.81	% Rft.	34.48	Ru.m.
	M012	3 miles (4.8 km) lead.	1,253.88	% Rft.	41.14	Ru.m.
	M012	Extra per mile (1.6 km) above 3 miles to 6 miles (4.8 km to 9.6 km) of lead.	184.18	% Rft.	6.04	Ru.m.
	M012	Extra per mile (1.6 km) above 6 miles to 10 miles (9.6 km to 16 km) of lead.	158.60	% Rft.	5.20	Ru.m.
	M012	Extra per mile (1.6 km) above 10 miles to 15 miles (16 km to 24 km) of lead.	137.04	% Rft.	4.50	Ru.m.
	M012	Extra per mile (1.6 km) above 15 miles to 20 miles (24 km to 32 km) of lead.	122.43	% Rft.	4.02	Ru.m.
	M012	Extra per mile (1.6 km) above 20 miles (32 km) of lead.	-	% Rft.	0.00	Ru.m.
(e)		15 inches dia (380 mm)				
	M013	1/2 mile (0.80 km) lead or part thereof.	1,040.57	% Rft.	34.14	Ru.m.
	M013	1 mile (1.6 km) lead.	1,199.33	% Rft.	39.35	Ru.m.
	M013	2 miles (3.2 km) lead.	1,510.53	% Rft.	49.56	Ru.m.
	M013	3 miles (4.8 km) lead.	1,802.45	% Rft.	59.14	Ru.m.
	M013	Extra per mile (1.6 km) above 3 miles to 6 miles (4.8 km to 9.6 km) of lead.	264.76	% Rft.	8.69	Ru.m.
	M013	Extra per mile (1.6 km) above 6 miles to 10 miles (9.6 km to 16 km) of lead.	227.98	% Rft.	7.48	Ru.m.
	M013	Extra per mile (1.6 km) above 10 miles to 15 miles (16 km to 24 km) of lead.	197.00	% Rft.	6.46	Ru.m.
	M013	Extra per mile (1.6 km) above 15 miles to 20 miles (24 km to 32 km) of lead.	175.99	% Rft.	5.77	Ru.m.
	M013	Extra per mile (1.6 km) above 20 miles (32 km) of lead.	-	% Rft.	0.00	Ru.m.
(f)		18 inches dia (640 mm)				
	M014	1/2 mile (0.80 km) lead or part thereof.	1,387.42	% Rft.	45.52	Ru.m.
	M014	1 mile (1.6 km) lead.	1,599.10	% Rft.	52.46	Ru.m.
	M014	2 miles (3.2 km) lead.	2,014.04	% Rft.	66.08	Ru.m.
	M014	3 miles (4.8 km) lead.	2,403.27	% Rft.	78.85	Ru.m.
	M014	Extra per mile (1.6 km) above 3 miles to 6 miles (4.8 km to 9.6 km) of lead.	353.02	% Rft.	11.58	Ru.m.

CARTAGE OF MATERIAL BY MECHANICAL TRANSPORT

Sub-Head Code-134

S. No.	Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
	M014	Extra per mile (1.6 km) above 6 miles to 10 miles (9.6 km to 16 km) of lead.	303.98	% Rft.	9.97	Ru.m.
	M014	Extra per mile (1.6 km) above 10 miles to 15 miles (16 km to 24 km) of lead.	262.67	% Rft.	8.62	Ru.m.
	M014	Extra per mile (1.6 km) above 15 miles to 20 miles (24 km to 32 km) of lead.	234.65	% Rft.	7.70	Ru.m.
	M014	Extra per mile (1.6 km) above 20 miles (32 km) of lead.	-	% Rft.	0.00	Ru.m.
(g)		21 inches dia (530 mm)				
	M015	1/2 mile (0.80 km) lead or part thereof.	1,849.90	% Rft.	60.69	Ru.m.
	M015	1 mile (1.6 km) lead.	2,132.14	% Rft.	69.95	Ru.m.
	M015	2 miles (3.2 km) lead.	2,685.39	% Rft.	88.10	Ru.m.
	M015	3 miles (4.8 km) lead.	3,204.36	% Rft.	105.13	Ru.m.
	M015	Extra per mile (1.6 km) above 3 miles to 6 miles (4.8 km to 9.6 km) of lead.	470.69	% Rft.	15.44	Ru.m.
	M015	Extra per mile (1.6 km) above 6 miles to 10 miles (9.6 km to 16 km) of lead.	405.30	% Rft.	13.30	Ru.m.
	M015	Extra per mile (1.6 km) above 10 miles to 15 miles (16 km to 24 km) of lead.	350.22	% Rft.	11.49	Ru.m.
	M015	Extra per mile (1.6 km) above 15 miles to 20 miles (24 km to 32 km) of lead.	312.87	% Rft.	10.26	Ru.m.
	M015	Extra per mile (1.6 km) above 20 miles (32 km) of lead.	-	% Rft.	0.00	Ru.m.
(h)		24 inches dia (610 mm)				
	M016	1/2 mile (0.80 km) lead or part thereof.	2,081.14	% Rft.	68.28	Ru.m.
	M016	1 mile (1.6 km) lead.	2,398.66	% Rft.	78.70	Ru.m.
	M016	2 miles (3.2 km) lead.	3,021.07	% Rft.	99.12	Ru.m.
	M016	3 miles (4.8 km) lead.	3,604.91	% Rft.	118.27	Ru.m.
	M016	Extra per mile (1.6 km) above 3 miles to 6 miles (4.8 km to 9.6 km) of lead.	529.52	% Rft.	17.37	Ru.m.
	M016	Extra per mile (1.6 km) above 6 miles to 10 miles (9.6 km to 16 km) of lead.	455.96	% Rft.	14.96	Ru.m.
	M016	Extra per mile (1.6 km) above 10 miles to 15 miles (16 km to 24 km) of lead.	394.00	% Rft.	12.93	Ru.m.
	M016	Extra per mile (1.6 km) above 15 miles to 20 miles (24 km to 32 km) of lead.	351.98	% Rft.	11.55	Ru.m.
	M016	Extra per mile (1.6 km) above 20 miles (32 km) of lead.	-	% Rft.	0.00	Ru.m.
(i)		27 inches dia (680 mm)				
	M017	1/2 mile (0.80 km) lead or part thereof.	2,774.85	% Rft.	91.04	Ru.m.

CARTAGE OF MATERIAL BY MECHANICAL TRANSPORT

Sub-Head Code-134

S. No.	Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
	M017	1 mile (1.6 km) lead.	3,198.21	% Rft.	104.93	Ru.m.
	M017	2 miles (3.2 km) lead.	4,028.09	% Rft.	132.16	Ru.m.
	M017	3 miles (4.8 km) lead.	4,806.54	% Rft.	157.69	Ru.m.
	M017	Extra per mile (1.6 km) above 3 miles to 6 miles (4.8 km to 9.6 km) of lead.	706.03	% Rft.	23.16	Ru.m.
	M017	Extra per mile (1.6 km) above 6 miles to 10 miles (9.6 km to 16 km) of lead.	607.95	% Rft.	19.95	Ru.m.
	M017	Extra per mile (1.6 km) above 10 miles to 15 miles (16 km to 24 km) of lead.	525.33	% Rft.	17.24	Ru.m.
	M017	Extra per mile (1.6 km) above 15 miles to 20 miles (24 km to 32 km) of lead.	469.30	% Rft.	15.40	Ru.m.
	M017	Extra per mile (1.6 km) above 20 miles (32 km) of lead.	-	% Rft.	0.00	Ru.m.
(j)		30 & 33 inches (760 mm & 840 mm) dia.				
	M018	1/2 mile (0.80 km) lead or part thereof.	3,329.82	% Rft.	109.25	Ru.m.
	M018	1 mile (1.6 km) lead.	3,837.85	% Rft.	125.91	Ru.m.
	M018	2 miles (3.2 km) lead.	4,833.71	% Rft.	158.59	Ru.m.
	M018	3 miles (4.8 km) lead.	5,767.85	% Rft.	189.23	Ru.m.
	M018	Extra per mile (1.6 km) above 3 miles to 6 miles (4.8 km to 9.6 km) of lead.	847.24	% Rft.	27.80	Ru.m.
	M018	Extra per mile (1.6 km) above 6 miles to 10 miles (9.6 km to 16 km) of lead.	729.54	% Rft.	23.94	Ru.m.
	M018	Extra per mile (1.6 km) above 10 miles to 15 miles (16 km to 24 km) of lead.	630.40	% Rft.	20.68	Ru.m.
	M018	Extra per mile (1.6 km) above 15 miles to 20 miles (24 km to 32 km) of lead.	563.16	% Rft.	18.48	Ru.m.
	M018	Extra per mile (1.6 km) above 20 miles (32 km) of lead.	-	% Rft.	0.00	Ru.m.
(k)		36, 39, 42,45 & 48 inches (910, 990, 1070, 1140 & 1220 mm) dia.				
	M019	1/2 mile (0.80 km) lead or part thereof.	5,549.70	% Rft.	182.08	Ru.m.
	M019	1 mile (1.6 km) lead.	6,396.42	% Rft.	209.86	Ru.m.
	M019	2 miles (3.2 km) lead.	8,056.18	% Rft.	264.31	Ru.m.
	M019	3 miles (4.8 km) lead.	9,613.08	% Rft.	315.39	Ru.m.
	M019	Extra per mile (1.6 km) above 3 miles to 6 miles (4.8 km to 9.6 km) of lead.	1,412.06	% Rft.	46.33	Ru.m.
	M019	Extra per mile (1.6 km) above 6 miles to 10 miles (9.6 km to 16 km) of lead.	1,215.90	% Rft.	39.89	Ru.m.
	M019	Extra per mile (1.6 km) above 10 miles to 15 miles (16 km to 24 km) of lead.	1,050.67	% Rft.	34.47	Ru.m.
	M019	Extra per mile (1.6 km) above 15 mites to 20 miles (24 km to 32 km) of lead.	938.60	% Rft.	30.79	Ru.m.
	M019	Extra per mile (1.6 km) above 20 miles (32 km) of lead.	-	% Rft.	0.00	Ru.m.

CARTAGE OF MATERIALS BY ANIMAL TRANSPORT

Code-135

CARTAGE OF MATERIAL BY ANIMAL TRANSPORT

Sub-Head Code-135

S. No.	Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
1	(a)	Cartage of sand. bajri, lime, murum, manure, earth, building rubbish etc. including loading, unloading and stacking etc. at site.				
	A001	1/2 mile (0.80 km) lead or part thereof.	132.64	% Cft	46.87	Cu.m.
	A001	1 mile (1.6 km) lead.	162.08	% Cft	57.27	Cu.m.
	A001	1-1/2 miles (2.4 km) ead.	191.42	% Cft	67.64	Cu.m.
	A001	2 miles (3.2 km) lead.	221.18	% Cft	78.16	Cu.m.
	A001	2-1/2 miles (4.02 km) lead.	250.76	% Cft	88.61	Cu.m.
	A001	3 miles (4.8 km) lead.	279.66	% Cft	98.82	Cu.m.
	A001	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	29.40	% Cft	10.39	Cu.m.
	(b)	Cartage of stone ballast and boulders including loading, unloading and stacking etc. at site:				
	A002	1/2 mile (0.80 km) lead or part thereof.	132.64	% Cft	46.87	Cu.m.
	A002	1 mile (1.6 km) lead.	162.08	% Cft	57.27	Cu.m.
	A002	1-1/2 miles (2.4 km) lead.	191.42	% Cft	67.64	Cu.m.
	A002	2 miles (3.2 km) lead.	221.18	% Cft	78.16	Cu.m.
	A002	2-1/2 miles (4.02 km) lead.	250.76	% Cft	88.61	Cu.m.
	A002	3 miles (4.8 km) lead.	279.66	% Cft	98.82	Cu.m.
	A002	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	29.40	% Cft	10.39	Cu.m.
2		Cartage of cement concrete blocks of sizes including loading, unloading and stacking etc. at site.				
	A003	1/2 mile (0.80 km) lead or part thereof.	212.22	% Cft	74.99	Cu.m.
	A003	1 mile (1.6 km) lead.	259.33	% Cft	91.64	Cu.m.
	A003	1-1/2 miles (2.4 km) lead.	306.26	% Cft	108.22	Cu.m.
	A003	2 miles (3.2 km) lead.	353.89	% Cft	125.05	Cu.m.
	A003	2-1/2 miles (4.02 km) lead.	401.22	% Cft	141.77	Cu.m.
	A003	3 miles (4.8 km) lead.	447.46	% Cft	158.11	Cu.m.
	A003	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	47.05	% Cft	16.62	Cu.m.
3		Cartage of bricks including loading, unloading and stacking etc. at site.				
	A004	1/2 mile (0.80 km) lead or part thereof.	110.53	%0 Nos.	110.53	%0 Nos.
	A004	1 mile (1.6 km) lead.	135.07	%0 Nos.	135.07	%0 Nos.
	A004	1-1/2 miles (2.4 km) lead.	159.51	%0 Nos.	159.51	%0 Nos.
	A004	2 miles (3.2 km) lead.	184.32	%0 Nos.	184.32	%0 Nos.
	A004	2-1/2 miles (4.02 km) lead.	208.97	%0 Nos.	208.97	%0 Nos.
	A004	3 miles (4.8 km) lead.	233.05	%0 Nos.	233.05	%0 Nos.

CARTAGE OF MATERIAL BY ANIMAL TRANSPORT

Sub-Head Code-135

S. No.	Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
	A004	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	24.50	%0 Nos.	24.50	%0 Nos.
4		Cartage of delicate materials, glass panes, doors and windows fittings, paints, varnish etc. including loading, unloading and stacking etc. at site.				
	A005	1/2 mile (0.80 km) lead or part thereof.	26.53	Cwt.	26.11	50 kg.
	A005	1 mile (1.6 km) lead.	32.42	Cwt.	31.91	50 kg.
	A005	1-1/2 miles (2.4 km) lead.	38.28	Cwt.	37.68	50 kg.
	A005	2 miles (3.2 km) lead.	44.24	Cwt.	43.54	50 kg.
	A005	2-1/2 miles (4.02 km) lead.	50.15	Cwt.	49.36	50 kg.
	A005	3 miles (4.8 km) lead.	55.93	Cwt.	55.05	50 kg.
	A005	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	5.88	Cwt.	5.79	50 kg.
5		Cartage of cement, steel G.I. And C.I. pipes, C.I., G.I.A.C. and aluminium sheets and other heavy material including loading, unloading and stacking etc. at site.				
	A006	1/2 mile (0.80 km) lead or part thereof.	53.05	Ton.	51.99	Tonne
	A006	1 mile (1.6 km) lead.	64.83	Ton.	63.54	Tonne
	A006	1-1/2 miles (2.4 km) lead.	76.57	Ton.	75.03	Tonne
	A006	2 miles (3.2 km) lead.	88.47	Ton.	86.70	Tonne
	A006	2-1/2 miles (4.02 km) lead.	100.30	Ton.	98.30	Tonne
	A006	3 miles (4.8 km) lead.	111.86	Ton.	109.63	Tonne
	A006	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	11.76	Ton.	11.53	Tonne
6		Cartage of timber including loading, unloading and stacking etc. at site.				
	A007	1/2 mile (0.80 km) lead or part thereof.	353.70	% Cft	124.98	Cu.m.
	A007	1 mile (1.6 km) lead.	432.22	% Cft	152.73	Cu.m.
	A007	1-1/2 miles (2.4 km) lead.	510.44	% Cft	180.37	Cu.m.
	A007	2 miles (3.2 km) lead.	589.81	% Cft	208.41	Cu.m.
	A007	2-1/2 miles (4.02 km) lead.	668.69	% Cft	236.29	Cu.m.
	A007	3 miles (4.8 km) lead.	745.76	% Cft	263.52	Cu.m.
	A007	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	78.41	% Cft	27.71	Cu.m.
7		Cartage of Tar, bitumen etc. including loading, unloading and stacking etc. at site.				
	A008	1/2 mile (0.80 km) lead or part thereof.	53.05	Ton.	51.99	Tonne
	A008	1 mile (1.6 km) lead.	64.83	Ton.	63.54	Tonne
	A008	1-1/2 miles (2.4 km) lead.	76.57	Ton.	75.03	Tonne
	A008	2 miles (3.2 km) lead.	88.47	Ton.	86.70	Tonne
	A008	2-1/2 miles (4.02 km) lead.	100.30	Ton.	98.30	Tonne
	A008	3 miles (4.8 km) lead.	111.86	Ton.	109.63	Tonne

CARTAGE OF MATERIAL BY ANIMAL TRANSPORT

Sub-Head Code-135

S. No.	Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
	A008	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	11.76	Ton.	11.53	Tonne
8		Cartage of Coal including loading, unloading and stacking etc. at site.				
	A009	1/2 mile (0.80 km) lead or part thereof.	53.05	Ton.	51.99	Tonne
	A009	1 mile (1.6 km) lead.	64.83	Ton.	63.54	Tonne
	A009	1-1/2 miles (2.4 km) lead.	76.57	Ton.	75.03	Tonne
	A009	2 miles (3.2 km) lead.	88.47	Ton.	86.70	Tonne
	A009	2-1/2 miles (4.02 km) lead.	100.30	Ton.	98.30	Tonne
	A009	3 miles (4.8 km) lead.	111.86	Ton.	109.63	Tonne
	A009	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	11.76	Ton.	11.53	Tonne
9		Cartage of R.C.C. pipes of any class with collars, including loading, unloading and stacking etc. at site:				
(a)		4 inches (100 mm)				
	A010	1/2 mile (0.80 km) lead or part thereof.	117.90	% Rft.	0.36	Ru.m.
	A010	1 mile (1.6 km) lead.	144.07	% Rft.	0.44	Ru.m.
	A010	1-1/2 miles (2.4 km) lead.	170.15	% Rft.	0.52	Ru.m.
	A010	2 miles (3.2 km) lead.	196.60	% Rft.	0.60	Ru.m.
	A010	2-1/2 miles (4.02 km) lead.	222.90	% Rft.	0.68	Ru.m.
	A010	3 miles (4.8 km) lead.	248.59	% Rft.	0.76	Ru.m.
	A010	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	26.14	% Rft.	0.08	Ru.m.
(b)		6 inches dia: (150 mm)				
	A011	1/2 mile (0.80 km) lead or part thereof.	176.85	% Rft.	0.54	Ru.m.
	A011	1 mile (1.6 km) lead.	216.11	% Rft.	0.66	Ru.m.
	A011	1-1/2 miles (2.4 km) lead.	255.22	% Rft.	0.78	Ru.m.
	A011	2 miles (3.2 km) lead.	294.91	% Rft.	0.90	Ru.m.
	A011	2-1/2 miles (4.02 km) lead.	334.35	% Rft.	1.02	Ru.m.
	A011	3 miles (4.8 km) lead.	372.88	% Rft.	1.14	Ru.m.
	A011	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	39.21	% Rft.	0.12	Ru.m.
(c)		9 inches dia (230 mm)				
	A012	1/2 mile (0.80 km) lead or part thereof.	252.64	% Rft.	0.77	Ru.m.
	A012	1 mile (1.6 km) lead.	308.73	% Rft.	0.94	Ru.m.
	A012	1-1/2 miles (2.4 km) lead.	364.60	% Rft.	1.11	Ru.m.
	A012	2 miles (3.2 km) lead.	421.29	% Rft.	1.28	Ru.m.
	A012	2-1/2 miles (4.02 km) lead.	477.64	% Rft.	1.46	Ru.m.
	A012	3 miles (4.8 km) lead.	532.69	% Rft.	1.62	Ru.m.
	A012	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	56.01	% Rft.	0.17	Ru.m.
(d)		12 inches dia (300 mm)				
	A013	1/2 mile (0.80 km) lead or part thereof.	294.75	% Rft.	0.90	Ru.m.

CARTAGE OF MATERIAL BY ANIMAL TRANSPORT

Sub-Head Code-135

S. No.	Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
	A013	1 mile (1.6 km) lead.	360.18	% Rft.	1.10	Ru.m.
	A013	1-1/2 miles (2.4 km) lead.	425.37	% Rft.	1.30	Ru.m.
	A013	2 miles (3.2 km) lead.	491.51	% Rft.	1.50	Ru.m.
	A013	2-1/2 miles (4.02 km) lead.	557.24	% Rft.	1.70	Ru.m.
	A013	3 miles (4.8 km) lead.	621.47	% Rft.	1.89	Ru.m.
	A013	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	65.34	% Rft.	0.20	Ru.m.
(e)		15 inches dia (380 mm)				
	A014	1/2 mile (0.80 km) lead or part thereof.	736.87	% Rft.	2.25	Ru.m.
	A014	1 mile (1.6 km) lead.	900.46	% Rft.	2.74	Ru.m.
	A014	1-1/2 miles (2.4 km) lead.	1063.42	% Rft.	3.24	Ru.m.
	A014	2 miles (3.2 km) lead.	1228.78	% Rft.	3.75	Ru.m.
	A014	2-1/2 miles (4.02 km) lead.	1393.11	% Rft.	4.25	Ru.m.
	A014	3 miles (4.8 km) lead.	1553.67	% Rft.	4.74	Ru.m.
	A014	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	163.36	% Rft.	0.50	Ru.m.
(f)		18 inches dia (640 mm)				
	A015	1/2 mile (0.80 km) lead or part thereof.	884.24	% Rft.	2.70	Ru.m.
	A015	1 mile (1.6 km) lead.	1080.55	% Rft.	3.29	Ru.m.
	A015	1-1/2 miles (2.4 km) lead.	1276.10	% Rft.	3.89	Ru.m.
	A015	2 miles (3.2 km) lead.	1474.53	% Rft.	4.49	Ru.m.
	A015	2-1/2 miles (4.02 km) lead.	1671.73	% Rft.	5.10	Ru.m.
	A015	3 miles (4.8 km) lead.	1864.41	% Rft.	5.68	Ru.m.
	A015	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	196.03	% Rft.	0.60	Ru.m.
(g)		21 inches dia (530 mm)				
	A016	1/2 mile (0.80 km) lead or part thereof.	1105.31	% Rft.	3.37	Ru.m.
	A016	1 mile (1.6 km) lead.	1350.69	% Rft.	4.12	Ru.m.
	A016	1-1/2 miles (2.4 km) lead.	1595.13	% Rft.	4.86	Ru.m.
	A016	2 miles (3.2 km) lead.	1843.16	% Rft.	5.62	Ru.m.
	A016	2-1/2 miles (4.02 km) lead.	2089.67	% Rft.	6.37	Ru.m.
	A016	3 miles (4.8 km) lead.	2330.51	% Rft.	7.10	Ru.m.
	A016	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	245.04	% Rft.	0.75	Ru.m.
(h)		24 inches dia (610 mm)				
	A017	1/2 mile (0.80 km) lead or part thereof.	1105.31	% Rft.	3.37	Ru.m.
	A017	1 mile (1.6 km) lead.	1350.69	% Rft.	4.12	Ru.m.
	A017	1-1/2 miles (2.4 km) lead.	1595.13	% Rft.	4.86	Ru.m.
	A017	2 miles (3.2 km) lead.	1843.16	% Rft.	5.62	Ru.m.
	A017	2-1/2 miles (4.02 km) lead.	2089.67	% Rft.	6.37	Ru.m.
	A017	3 miles (4.8 km) lead.	2330.51	% Rft.	7.10	Ru.m.
	A017	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	245.04	% Rft.	0.75	Ru.m.

CARTAGE OF MATERIAL BY ANIMAL TRANSPORT

Sub-Head Code-135

S. No.	Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
(i)		27 inches dia (680 mm)				
	A018	1/2 mile (0.80 km) lead or part thereof.	1473.74	% Rft.	4.49	Ru.m.
	A018	1 mile (1.6 km) lead.	1800.92	% Rft.	5.49	Ru.m.
	A018	1-1/2 miles (2.4 km) lead.	2126.84	% Rft.	6.48	Ru.m.
	A018	2 miles (3.2 km) lead.	2457.55	% Rft.	7.49	Ru.m.
	A018	2-1/2 miles (4.02 km) lead.	2786.22	% Rft.	8.49	Ru.m.
	A018	3 miles (4.8 km) lead.	3107.34	% Rft.	9.47	Ru.m.
	A018	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	326.72	% Rft.	1.00	Ru.m.
(j)		30 inches (760 mm) dia:				
	A019	1/2 mile (0.80 km) lead or part thereof.	1473.74	% Rft.	4.49	Ru.m.
	A019	1 mile (1.6 km) lead.	1800.92	% Rft.	5.49	Ru.m.
	A019	1-1/2 miles (2.4 km) lead.	2126.84	% Rft.	6.48	Ru.m.
	A019	2 miles (3.2 km) lead.	2457.55	% Rft.	7.49	Ru.m.
	A019	2-1/2 miles (4.02 km) lead.	2786.22	% Rft.	8.49	Ru.m.
	A019	3 miles (4.8 km) lead.	3107.34	% Rft.	9.47	Ru.m.
	A019	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	326.72	% Rft.	1.00	Ru.m.
(k)		33 inches (840 mm) dia.				
	A020	1/2 mile (0.80 km) lead or part thereof.	2210.61	% Rft.	6.74	Ru.m.
	A020	1 mile (1.6 km) lead.	2701.38	% Rft.	8.23	Ru.m.
	A020	1-1/2 miles (2.4 km) lead.	3190.26	% Rft.	9.72	Ru.m.
	A020	2 miles (3.2 km) lead.	3686.33	% Rft.	11.24	Ru.m.
	A020	2-1/2 miles (4.02 km) lead.	4179.33	% Rft.	12.74	Ru.m.
	A020	3 miles (4.8 km) lead.	4661.02	% Rft.	14.21	Ru.m.
	A020	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	490.08	% Rft.	1.49	Ru.m.
(l)		36 inches (910 mm) dia.				
	A021	1/2 mile (0.80 km) lead or part thereof.	2210.61	% Rft.	6.74	Ru.m.
	A021	1 mile (1.6 km) lead.	2701.38	% Rft.	8.23	Ru.m.
	A021	1-1/2 miles (2.4 km) lead.	3190.26	% Rft.	9.72	Ru.m.
	A021	2 miles (3.2 km) lead.	3686.33	% Rft.	11.24	Ru.m.
	A021	2-1/2 miles (4.02 km) lead.	4179.33	% Rft.	12.74	Ru.m.
	A021	3 miles (4.8 km) lead.	4661.02	% Rft.	14.21	Ru.m.
	A021	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	490.08	% Rft.	1.49	Ru.m.
(m)		39 inches (990 mm) dia.				
	A022	1/2 mile (0.80 km) lead or part thereof.	2210.61	% Rft.	6.74	Ru.m.
	A022	1 mile (1,6 km) lead.	2701.38	% Rft.	8.23	Ru.m.
	A022	1-1/2 miles (2.4 km) lead.	3190.26	% Rft.	9.72	Ru.m.
	A022	2 miles (3.2 km) lead.	3686.33	% Rft.	11.24	Ru.m.

CARTAGE OF MATERIAL BY ANIMAL TRANSPORT

Sub-Head Code-135

S. No.	Code	Description	Rate (Rs.)	FPS	Rate (Rs.)	MKS
	A022	2-1/2 miles (4.02 km) lead.	4179.33	% Rft.	12.74	Ru.m.
	A022	3 miles (4.8 km) lead.	4661.02	% Rft.	14.21	Ru.m.
	A022	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	490.08	% Rft.	1.49	Ru.m.
(n)		42 inches (1070 mm) dia.				
	A023	1/2 mile (0.80 km) lead or part thereor.	2210.61	% Rft.	6.74	Ru.m.
	A023	1 mile (1.6 km) lead.	2701.38	% Rft.	8.23	Ru.m.
	A023	1-1/2 miles (2.4 km) lead.	3190.26	% Rft.	9.72	Ru.m.
	A023	2 miles (3.2 km) lead.	3686.33	% Rft.	11.24	Ru.m.
	A023	2-1/2 miles (4.02 km) lead.	4179.33	% Rft.	12.74	Ru.m.
	A023	3 miles (4.8 km) lead.	4661.02	% Rft.	14.21	Ru.m.
	A023	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	490.08	% Rft.	1.49	Ru.m.
(o)		45 inches (1140 mm) dia.				
	A024	1/2 mile (0.80 km) lead or part thereor.	2210.61	% Rft.	6.74	Ru.m.
	A024	1 mile (1.6 km) lead.	2701.38	% Rft.	8.23	Ru.m.
	A024	1-1/2 miles (2.4 km) lead.	3190.26	% Rft.	9.72	Ru.m.
	A024	2 miles (3.2 km) lead.	3686.33	% Rft.	11.24	Ru.m.
	A024	2-1/2 miles (4.02 km) lead.	4179.33	% Rft.	12.74	Ru.m.
	A024	3 miles (4.8 km) lead.	4661.02	% Rft.	14.21	Ru.m.
	A024	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	490.08	% Rft.	1.49	Ru.m.
(p)		48 inches (1220 mm) dia.				
	A025	1/2 mile (0.80 km) lead or part thereor.	2210.61	% Rft.	6.74	Ru.m.
	A025	1 mile (1.6 km) lead.	2701.38	% Rft.	8.23	Ru.m.
	A025	1-1/2 miles (2.4 km) lead.	3190.26	% Rft.	9.72	Ru.m.
	A025	2 miles (3.2 km) lead.	3686.33	% Rft.	11.24	Ru.m.
	A025	2-1/2 miles (4.02 km) lead.	4179.33	% Rft.	12.74	Ru.m.
	A025	3 miles (4.8 km) lead.	4661.02	% Rft.	14.21	Ru.m.
	A025	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	490.08	% Rft.	1.49	Ru.m.
(q)		Cartage of material other than items specified above.				
	A026	1/2 mile (0.80 km) lead or part thereor.	4.42	Maund	0.01	Kg.
	A026	1 mile (1.6 km) lead.	5.40	Maund	0.02	Kg.
	A026	1-1/2 miles (2.4 km) lead.	6.38	Maund	0.02	Kg.
	A026	2 miles (3.2 km) lead.	7.37	Maund	0.02	Kg.
	A026	2-1/2 miles (4.02 km) lead.	8.36	Maund	0.03	Kg.
	A026	3 miles (4.8 km) lead.	9.32	Maund	0.03	Kg.
	A026	Above 3 miles (4.8 km) lead per 1/2 mile (0.80 km) or part thereof.	0.98	Maund	0.00	Kg.

CARTAGE OF MATERIALS INCLUDING LOADING, UNLOADING AND STACKING AT SITE BY ANIMAL TRANSPORT

	S. No.	Description All type of Material	Capicity per Trip		Unit			RATE						
								1/2 Mile	1 Mile	1-1/2 Miles	2 Miles	2-1/2 Miles	3 Miles	Above 3 Mile per 1/2 Mile.
								RATES PER TRIP						
								Rs 482.32	Rs 589.39	Rs 696.06	Rs 804.29	Rs 911.85	Rs 1,016.95	Rs 106.93
								RATES PER UNIT						
								Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
A001	1 (a)	Sand, Bajri, lime, murum, manure, earth building rubbish	400.00	Cft	100 Cft.			120.58	147.35	174.01	201.07	227.96	254.24	26.73
			Contractors profit.		10%			12.06	14.73	17.40	20.11	22.80	25.42	2.67
							Total	132.64	162.08	191.42	221.18	250.76	279.66	29.40
A002	(b)	Stone Ballast and Boulders.	400.00	Cft	100 Cft.			120.58	147.35	174.01	201.07	227.96	254.24	26.73
			Contractors profit.		10%			12.06	14.73	17.40	20.11	22.80	25.42	2.67
							Total	132.64	162.08	191.42	221.18	250.76	279.66	29.40
A003	2	Cement concrete blocks of size	250.00	Cft	100 Cft.			192.93	235.76	278.42	321.72	364.74	406.78	42.77
			Contractors profit.		10%			19.29	23.58	27.84	32.17	36.47	40.68	4.28
							Total	212.22	259.33	306.26	353.89	401.22	447.46	47.05
A004	3	Bricks	4,800.00	Nos	1,000.00	Nos		100.48	122.79	145.01	167.56	189.97	211.86	22.28
			Contractors profit.		10%			10.05	12.28	14.50	16.76	19.00	21.19	2.23
							Total	110.53	135.07	159.51	184.32	208.97	233.05	24.50
A005	4	Delicate Materials, e.g Glass Panes, Doors and Windows Fittings, paints, Vernish etc.	20.00	Cwt	Cwt.			24.12	29.47	34.80	40.21	45.59	50.85	5.35
			Contractors profit.		10%			2.41	2.95	3.48	4.02	4.56	5.08	0.53
							Total	26.53	32.42	38.28	44.24	50.15	55.93	5.88
A006	5	Cement, Steel, G.I and C.I pipe C.I G.I A.C and aluminimum sheets & other havy materials.	10.00	Ton	Ton			48.23	58.94	69.61	80.43	91.19	101.69	10.69
			Contractors profit.		10%			4.82	5.89	6.96	8.04	9.12	10.17	1.07
							Total	53.05	64.83	76.57	88.47	100.30	111.86	11.76
A007	6	Timber.	150.00	Cft	100	Cft		321.54	392.93	464.04	536.19	607.90	677.97	71.28
			Contractors profit.		10%			32.15	39.29	46.40	53.62	60.79	67.80	7.13
							Total	353.70	432.22	510.44	589.81	668.69	745.76	78.41
A008	7	Tar, Bitumen etc.	10	Ton	Ton			48.23	58.94	69.61	80.43	91.19	101.69	10.69
			Contractors profit.		10%			4.82	5.89	6.96	8.04	9.12	10.17	1.07
							Total	53.05	64.83	76.57	88.47	100.30	111.86	11.76
A009	8	Coal	10	Ton	Ton			48.23	58.94	69.61	80.43	91.19	101.69	10.69
			Contractors profit.		10%			4.82	5.89	6.96	8.04	9.12	10.17	1.07
							Total	53.05	64.83	76.57	88.47	100.30	111.86	11.76
	9	R.C.C pipe of any class & collars.												
A010	(a)	4 inches dia.	450.00	Rft	100	Rft		107.18	130.98	154.68	178.73	202.63	225.99	23.76
			Contractors profit.		10%			10.72	13.10	15.47	17.87	20.26	22.60	2.38
							Total	117.90	144.07	170.15	196.60	222.90	248.59	26.14
A011	(b)	6 inches dia.	300	Rft	100	Rft		160.77	196.46	232.02	268.10	303.95	338.98	35.64
			Contractors profit.		10%			16.08	19.65	23.20	26.81	30.40	33.90	3.56
							Total	176.85	216.11	255.22	294.91	334.35	372.88	39.21
A012	(c)	9 inches dia.	210	Rft	100	Rft		229.67	280.66	331.46	383.00	434.22	484.26	50.92
			Contractors profit.		10%			22.97	28.07	33.15	38.30	43.42	48.43	5.09
							Total	252.64	308.73	364.60	421.29	477.64	532.69	56.01

S. No	Description All type of Material	Capicity per Trip		Unit			RATE						
							1/2 Mile	1 Mile	1-1/2 Miles	2 Miles	2-1/2 Miles	3 Miles	Above 3 Mile per 1/2 Mile.
	(d) 12 inches dia.	180	Rft	100	Rft		267.95	327.44	386.70	446.83	506.59	564.97	59.40
		Contractors profit.		10%			26.80	32.74	38.67	44.68	50.66	56.50	5.94
A013						Total	294.75	360.18	425.37	491.51	557.24	621.47	65.34
	(e) 15 inches dia.	72	Rft	100	Rft		669.88	818.60	966.74	1,117.07	1,266.46	1,412.43	148.51
		Contractors profit.		10%			66.99	81.86	96.67	111.71	126.65	141.24	14.85
A014						Total	736.87	900.46	1,063.42	1,228.78	1,393.11	1,553.67	163.36
	(f) 18 inches dia.	60	Rft	100	Rft		803.86	982.32	1,160.09	1,340.48	1,519.76	1,694.92	178.21
		Contractors profit.		10%			80.39	98.23	116.01	134.05	151.98	169.49	17.82
A015						Total	884.24	1,080.55	1,276.10	1,474.53	1,671.73	1,864.41	196.03
	(g) 21 inches dia.	48	Rft	100	Rft		1,004.82	1,227.90	1,450.12	1,675.60	1,899.70	2,118.64	222.76
		Contractors profit.		10%			100.48	122.79	145.01	167.56	189.97	211.86	22.28
A016						Total	1,105.31	1,350.69	1,595.13	1,843.16	2,089.67	2,330.51	245.04
	(h) 24 inches dia.	48	Rft	100	Rft		1,004.82	1,227.90	1,450.12	1,675.60	1,899.70	2,118.64	222.76
		Contractors profit.		10%			100.48	122.79	145.01	167.56	189.97	211.86	22.28
A017						Total	1,105.31	1,350.69	1,595.13	1,843.16	2,089.67	2,330.51	245.04
	(i) 27 inches dia.	36		100	Rft		1,339.76	1,637.20	1,933.49	2,234.14	2,532.93	2,824.86	297.02
		Contractors profit.		10%			133.98	163.72	193.35	223.41	253.29	282.49	29.70
A018						Total	1,473.74	1,800.92	2,126.84	2,457.55	2,786.22	3,107.34	326.72
	(j) 30 inches dia.	36	Rft	100	Rft		1,339.76	1,637.20	1,933.49	2,234.14	2,532.93	2,824.86	297.02
		Contractors profit.		10%			133.98	163.72	193.35	223.41	253.29	282.49	29.70
A019						Total	1,473.74	1,800.92	2,126.84	2,457.55	2,786.22	3,107.34	326.72
	(k) 33 inches dia.	24	Rft	100	Rft		2,009.65	2,455.80	2,900.23	3,351.21	3,799.39	4,237.29	445.53
		Contractors profit.		10%			200.96	245.58	290.02	335.12	379.94	423.73	44.55
A020						Total	2,210.61	2,701.38	3,190.26	3,686.33	4,179.33	4,661.02	490.08
	(l) 36 inches dia.	24	Rft	100	Rft		2,009.65	2,455.80	2,900.23	3,351.21	3,799.39	4,237.29	445.53
		Contractors profit.		10%			200.96	245.58	290.02	335.12	379.94	423.73	44.55
A021						Total	2,210.61	2,701.38	3,190.26	3,686.33	4,179.33	4,661.02	490.08
	(m) 39 inches dia.	24	Rft	100	Rft		2,009.65	2,455.80	2,900.23	3,351.21	3,799.39	4,237.29	445.53
		Contractors profit.		10%			200.96	245.58	290.02	335.12	379.94	423.73	44.55
A022						Total	2,210.61	2,701.38	3,190.26	3,686.33	4,179.33	4,661.02	490.08
	(n) 42 inches dia.	24	Rft	100	Rft		2,009.65	2,455.80	2,900.23	3,351.21	3,799.39	4,237.29	445.53
		Contractors profit.		10%			200.96	245.58	290.02	335.12	379.94	423.73	44.55
A023						Total	2,210.61	2,701.38	3,190.26	3,686.33	4,179.33	4,661.02	490.08
	(o) 45 inches dia.	24	Rft	100	Rft		2,009.65	2,455.80	2,900.23	3,351.21	3,799.39	4,237.29	445.53
		Contractors profit.		10%			200.96	245.58	290.02	335.12	379.94	423.73	44.55
A024						Total	2,210.61	2,701.38	3,190.26	3,686.33	4,179.33	4,661.02	490.08
	(p) 48 inches dia.	24	Rft	100	Rft		2,009.65	2,455.80	2,900.23	3,351.21	3,799.39	4,237.29	445.53
				10%			200.96	245.58	290.02	335.12	379.94	423.73	44.55
A025						Total	2,210.61	2,701.38	3,190.26	3,686.33	4,179.33	4,661.02	490.08
	(q) Material other than items	120	Mds	Mds.			4.02	4.91	5.80	6.70	7.60	8.47	0.89
	specifited above.	Contractors profit.		10%			0.40	0.49	0.58	0.67	0.76	0.85	0.09
A026						Total	4.42	5.40	6.38	7.37	8.36	9.32	0.98

CARTAGE OF MATERIAL BY MECHANICAL TRANSPORT DRIVEN BY PETROL

Lead in Mile (L)	Average Speed (S)	No. of Trips $N = \frac{8}{Sk\left(\frac{2L}{S}+\frac{3}{4}\right)}$	Milage done 2NL + 4	Gallons of Petrol Consumed	Cost of Petrol at Rs.660.53 per Gallons. 660.53	Quantity of Oil at 1/40 of Petrol	2854.88 Amount of Oil at Rs. 2854.88 per Gallons.	Cost of 6 Beldar at Rs. 950/- 950.00	Hire Charges of Truck per day. 5000	Total Cost	Cost per Trip	Increase in cost over previous Miles.	Increase: Average cost per additional Miles.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1/2	10	9.41	9.41 + 4	1.34	885.11	0.03	95.64	2,850.00	5,000.00	8,830.75	938.44	-	-	1 No of trips in a working day of 8hrs. $N = \frac{8}{Sk\left(\frac{2L}{S}+\frac{3}{4}\right)}$ Where L- lead in miles S - Speed in Miles per hour and 3/4 hour is allowed for loading and unloading in each trip. 2. Consumption of Mobile Oil assumed at 1 Gallon per 400 Miles or 1/40 of petrol comsumption. 3. In calculaitng Milage done an extra allowance of 4 miles has been made for movement of truck from parking place to duty and back. 4. Cost of Petrol assumed is Rs. 660.53 per Gallon. (I) Cost of Mobile Oil at Rs.2854.88 per Gallon. (ii) Hire charges of Truck at Rs. 5000/- per 8 hour a day. 5. Milage for pucca Road has been taken 10 to 12 miles per gallon and that of kachcha road 8 to 10 miles and as such an average of 10 miles per gallon has been taken.
1	10.50	8.51	17.02 + 4	2.1	1,387.11	0.05	149.88	2,850.00	5,000.00	9,386.99	1,103.05	-	-	
2	11.00	7.18	28.72 + 4	3.27	2,159.93	0.08	233.39	2,850.00	5,000.00	10,243.32	1,426.65	-	-	
3	11.50	6.29	37.74 + 4	4.17	2,754.41	0.10	297.62	2,850.00	5,000.00	10,902.03	1,733.23	-	-	
4	12.00	5.65	45.20 + 4	4.92	3,249.81	0.12	351.15	2,850.00	5,000.00	11,450.96	2,026.72	293.49	-	
5	12.50	5.16	51.60 + 4	5.56	3,672.55	0.14	396.83	2,850.00	5,000.00	11,919.38	2,309.96	283.24	283.06	
6	13.00	4.78	57.36 + 4	6.14	4,055.65	0.15	438.22	2,850.00	5,000.00	12,343.88	2,582.40	272.44		
7	13.50	4.48	62.72 + 4	6.67	4,405.74	0.17	476.05	2,850.00	5,000.00	12.731.79	2,841.92	259.52		
8	14.00	4.23	67.68 + 4	7.17	4,736.00	0.18	511.74	2,850.00	5,000.00	13,097.74	3,096.39	254.48	250.48	
9	14.50	4.02	72.36 + 4	7.64	5,046.45	0.19	545.28	2,850.00	5,000.00	13,441.73	3,343.71	247.32		
10	15.00	3.84	76.80 + 4	8.08	5,337.08	0.20	576.69	2,850.00	5,000.00	13,763.77	3,584.31	240.60		
11	15.50	3.69	81.18 + 4	8.52	5,627.72	0.21	608.09	2,850.00	5,000.00	14,085.81	3,817.29	232.98		
12	16.00	3.56	85.44 + 4	8.94	5,905.14	0.22	638.07	2,850.00	5,000.00	14,393.20	4,043.03	225.74		
13	16.50	3.44	89.40 + 4	9.34	6,169.35	0.23	666.61	2,850.00	5,000.00	14,685.96	4,269.18	226.14	223.37	
14	17.00	3.34	93.52 + 4	9.75	6,440.17	0.24	695.88	2,850.00	5,000.00	14,986.04	4,486.84	217.66		
15	17.50	3.25	97.50 + 4	10.15	6,704.38	0.25	724.43	2,850.00	5,000.00	15,278.81	4,701.17	214.33		
16	18.00	3.16	101.12 + 4	10.51	6,942.17	0.26	750.12	2,850.00	5,000.00	15,542.29	4,918.45	217.28		
17	18.50	3.09	105.06 + 4	10.91	7,206.38	0.27	778.67	2,850.00	5,000.00	15,835.05	5,124.61	206.17		
18	19.00	3.02	108.72 + 4	11.27	7,444.17	0.28	804.36	2,850.00	5,000.00	16,098.54	5,330.64	206.03	204.93	
19	19.50	2.96	112.48 + 4	11.65	7,695.17	0.29	831.48	2,850.00	5,000.00	16,376.66	5,532.65	202.01		
20	20.00	2.91	116.40 + 4	12.04	7,952.78	0.30	859.32	2,850.00	5,000.00	16,662.10	5,725.81	193.15		
21	For each Additional mile above 20 miles = 204.93-(223.37-204.93) =						186.48							

CARTAGE OF MATERIAL BY MECHANICAL TRANSPORT DRIVEN BY DIESEL

							2854.88					Increase		
Lead ir Mile (L)	Average Speed (S)	No. of Trips N = 8 Sk 2L + 3 S 4	Milage done 2NL + 4	Gallons of Diesel Consumed	Cost of Diese at Rs.625.62 per Gallons. 625.62	Quantity of Oil at 1/40 of Diesel	Amount of Oil at Rs. 2854.88 per Gallons.	Cost of 6 Beldar at Rs. 950/- 950.00	Hire Charges of Truck per day. 5000	Total Cost	Cost per Trip	n cost ove previous Miles.	Average cost per additional Miles.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1/2	10	9.41	9.41 +4	0.75	469.22	0.02	53.53	5,700.00	5,000.00	11,222.74	1,192.64	-	-	1 No of trips in a working day of 8hrs. N = 8 Sk 2L + 3 S 4 Where L- lead in miles S - Speed in Miles per hour and 3/4 hour is allowed for loading and unloading in each trip. 2. Consumption of Mobile Oil assumed at 1 Gallon per 400 Miles or 1/40 of petrol comsumption. 3. In calculaitng Milage done an extra allowance of 4 miles has been made for movement of truck from parking place to duty and back. 4. Cost of Diesel assumed is Rs. 625.62 per Gallon. (I) Cost of Mobile Oil at Rs.2854.88 per Gallon. (ii) Hire charges of Truck at Rs. 5000/- per 8 hour a day. 5. Milage for pucca Road has been taken 10 to 12 miles per gallon and that of kachcha road 8 to 10 miles and as such an average of 10 miles per gallon has been taken.
1	10.50	8.51	17.02 +4	1.17	731.98	0.03	83.51	5,700.00	5,000.00	11,515.48	1,353.17	-	-	
2	11.00	7.18	28.72 +4	1.82	1,138.63	0.05	129.90	5,700.00	5,000.00	11,968.53	1,666.93	-	-	
3	11.50	6.29	37.74 +4	2.32	1,451.44	0.06	165.58	5,700.00	5,000.00	12,317.02	1,958.19	-	-	
4	12.00	5.65	45.20 +4	2.73	1,707.94	0.07	194.85	5,700.00	5,000.00	12,602.79	2,230.58	272.39	-	
5	12.50	5.16	51.60 +4	3.09	1,933.17	0.08	220.54	5,700.00	5,000.00	12,853.71	2,491.03	260.45	259.18	
6	13.00	4.78	57.36 +4	3.41	2,133.36	0.09	243.38	5,700.00	5,000.00	13,076.74	2,735.72	244.69		
7	13.50	4.48	62.72 +4	3.71	2,321.05	0.09	264.79	5,700.00	5,000.00	13,285.84	2,965.59	229.87		
8	14.00	4.23	67.68 +4	3.98	2,489.97	0.10	284.06	5,700.00	5,000.00	13,474.03	3,185.35	219.76	216.43	
9	14.50	4.02	72.36 +4	4.24	2,652.63	0.11	302.62	5,700.00	5,000.00	13,655.25	3,396.83	211.48		
10	15.00	3.84	76.80 +4	4.49	2,809.03	0.11	320.46	5,700.00	5,000.00	13,829.49	3,601.43	204.60		
11	15.50	3.69	81.18 +4	4.73	2,959.18	0.12	337.59	5,700.00	5,000.00	13,996.77	3,793.16	191.73		
12	16.00	3.56	85.44 +4	4.97	3,109.33	0.12	354.72	5,700.00	5,000.00	14,164.05	3,978.67	185.50		
13	16.50	3.44	89.40 +4	5.19	3,246.97	0.13	370.42	5,700.00	5,000.00	14,317.39	4,162.03	183.37	180.09	
14	17.00	3.34	93.52 +4	5.42	3,390.86	0.14	386.84	5,700.00	5,000.00	14,477.70	4,334.64	172.61		
15	17.50	3.25	97.50 +4	5.64	3,528.50	0.14	402.54	5,700.00	5,000.00	14,631.03	4,501.86	167.22		
16	18.00	3.16	101.12 +4	5.84	3,653.62	0.15	416.81	5,700.00	5,000.00	14,770.43	4,674.19	172.33		
17	18.50	3.09	105.06 +4	6.06	3,791.26	0.15	432.51	5,700.00	5,000.00	14,923.77	4,829.70	155.51		
18	19.00	3.02	108.72 +4	6.26	3,916.38	0.16	446.79	5,700.00	5,000.00	15,063.17	4,987.80	158.11	155.50	
19	19.50	2.96	112.48 +4	6.47	4,047.76	0.16	461.78	5,700.00	5,000.00	15,209.54	5,138.36	150.55		
20	20.00	2.91	116.40 +4	6.69	4,185.40	0.17	477.48	5,700.00	5,000.00	15,362.88	5,279.34	140.98		

21 For each Additional mile above 20 miles = 155.50-(180.09-155.50) = 130.91

CARTAGE OF MATERIALS INCLUDING LOADING, UNLOADING AND STACKING AT SITE BY MECHANICAL TRANSPORT

Code	S. No	Description All type of Material	Capicity per Trip		Unit of Rate						EXTRA PER MILES BETWEEN						
							1/2 Mile or part there of	1 Mile	2 Miles	3 Miles	3 to 6 Miles	6 to 10 Miles	10 to 15 Miles	15 to 20 Miles	Above 20 miles	5 mile lead	10 mile lead
	1	2	3		4		5	6	7	8	9	10	11	12	13		
		(Petrol + Diesel Average)	Cost per Trip				1,065.54	1,228.11	1,546.79	1,845.71	271.12	233.45	201.73	180.21	-		
C001	1	Carriage of Bricks	4000	Nos	1000	Nos	266.39	307.03	386.70	461.43	67.78	58.36	50.43	45.05	-	596.99	**898.22**
C002			Contractors profit.		Add 25%		66.60	76.76	96.67	115.36	16.94	14.59	12.61	11.26	-		
M001					Total		332.98	383.79	483.37	576.78	84.72	72.95	63.04	56.32	-		
C003	2	Carriage of Sand, Bajri, lime, murum,manure, earth, building rubbish etc.	400	Cft	100	Cft	266.39	307.03	386.70	461.43	67.78	58.36	50.43	45.05	-	596.99	**898.22**
C004			Contractors profit.		Add 25%		66.60	76.76	96.67	115.36	16.94	14.59	12.61	11.26	-		
M002					Total		332.98	383.79	483.37	576.78	84.72	72.95	63.04	56.32	-		
C005	3	Carriage of Stone brickbat ball single bouldors and C.C Block.	400	Cft	100	Cft	266.39	307.03	386.70	461.43	67.78	58.36	50.43	45.05	-	596.99	**898.22**
C006			Contractors profit.		Add 25%		66.60	76.76	96.67	115.36	16.94	14.59	12.61	11.26	-		
M003					Total		332.98	383.79	483.37	576.78	84.72	72.95	63.04	56.32	-		
C007	4	Carriage of Cement, Steel, C.I and G.I pipe, G.I. A.C and aluminimum sheets and other heavy materials.	10	Ton	Ton		106.55	122.81	154.68	184.57	27.11	23.35	20.17	18.02	-	238.79	**359.29**
C008			Contractors profit.		Add 25%		26.64	30.70	38.67	46.14	6.78	5.84	5.04	4.51	-		
M004					Total		133.19	153.51	193.35	230.71	33.89	29.18	25.22	22.53	-		
C009	5	Carriage of delicate materials glass panes, doors, windows fittings, paints, varnishes etc.	10	Ton	Ton		106.55	122.81	154.68	184.57	27.11	23.35	20.17	18.02	-	238.79	**184.57**
C010			Contractors profit.		Add 25%		26.64	30.70	38.67	46.14	6.78	5.84	5.04	4.51	-		
M005					Total		133.19	153.51	193.35	230.71	33.89	29.18	25.22	22.53	-		
C011	6	Carriage of Timber.	500	Cft	100	Cft	213.11	245.62	309.36	369.14	54.22	46.69	40.35	36.04	-	477.59	**718.57**
C012			Contractors profit.		Add 25%		53.28	61.41	77.34	92.29	13.56	11.67	10.09	9.01	-		
M006					Total		266.39	307.03	386.70	461.43	67.78	58.36	50.43	45.05	-		
C013	7	Carriage of Tar, Bitumen.	10	Ton	Ton		106.55	122.81	154.68	184.57	27.11	23.35	20.17	18.02	-	238.79	**359.29**
C014			Contractors profit.		Add 25%		26.64	30.70	38.67	46.14	6.78	5.84	5.04	4.51	-		
M007					Total		133.19	153.51	193.35	230.71	33.89	29.18	25.22	22.53	-		
C015	8	Carriage of Coal.	10	Ton	Ton		106.55	122.81	154.68	184.57	27.11	23.35	20.17	18.02	-	238.79	**184.57**
C016			Contractors profit.		Add 25%		26.64	30.70	38.67	46.14	6.78	5.84	5.04	4.51	-		
M008					Total		133.19	153.51	193.35	230.71	33.89	29.18	25.22	22.53	-		
C017	9	Carriage of R.C.C pipes of any class with collars 4 inches dia.	624	Rft	100	Rft	170.76	196.81	247.88	295.79	43.45	37.41	32.33	28.88	-	382.68	**295.79**
C018			Contractors profit.		Add 25%		42.69	49.20	61.97	73.95	10.86	9.35	8.08	7.22	-		
M009					Total		213.45	246.02	309.85	369.73	54.31	46.77	40.41	36.10	-		
C019		6 inches dia.	444		100	Rft	239.99	276.60	348.38	415.70	61.06	52.58	45.43	40.59	-	537.83	**415.70**
C020			Contractors profit	Rft	Add 25%		24.00	27.66	34.84	41.57	6.11	5.26	4.54	4.06	-		
M010					Total		263.99	304.26	383.21	457.27	67.17	57.84	49.98	44.65	-		
C021		9 inches dia.	246		100	Rft	433.15	499.23	628.77	750.29	110.21	94.90	82.00	73.26	-	970.71	**750.29**
C022			Contractors profit	Rft	Add 25%		108.29	124.81	157.19	187.57	27.55	23.72	20.50	18.31	-		
M011					Total		541.43	624.04	785.97	937.86	137.76	118.62	102.50	91.57	-		
C023		12 inches dia.	184	Rft	100	Rft	579.10	667.45	840.64	1,003.10	147.35	126.88	109.63	97.94	-	1,297.80	**1,003.10**
C024			Contractors profit.		Add 25%		144.77	166.86	210.16	250.78	36.84	31.72	27.41	24.49	-		
M012					Total		723.87	834.32	1,050.81	1,253.88	184.18	158.60	137.04	122.43	-		

											EXTRA PER MILES BETWEEN						
Code	S. No	Description All type of Material	Capicity per Trip		Unit of Rate		1/2 Mile or part there of	1 Mile	2 Miles	3 Miles	3 to 6 Miles	6 to 10 Miles	10 to 15 Miles	15 to 20 Miles	Above 20 miles	5 mile lead	10 mile lead
	1	2	3		4		5	6	7	8	9	10	11	12	13		
C025		15 inches dia.	128	Rft	100	Rft	832.45	959.46	1.208.43	1,441.96	211.81	182.39	157.60	140.79	-	1,865.58	**1,441.96**
C026			Contractors profit.		Add 25%		208.11	239.87	302.11	360.49	52.95	45.60	39.40	35.20	-		
M013					Total		1,040.57	1,199.33	1,510.53	1,802.45	264.76	227.98	197.00	175.99	-		
C027		18 inches dia.	96	Rft	100	Rft	1,109.94	1,279.28	1,611.24	1,922.62	282.41	243.18	210.13	187.72	-	2,487.44	**1,922.62**
C028			Contractors profit.		Add 25%		277.48	319.82	402.81	480.65	70.60	60.80	52.53	46.93	-		
M014					Total		1,387.42	1,599.10	2,014.04	2,403.27	353.02	303.98	262.67	234.65	-		
C029		21 inches dia.	72	Rft	100	Rft	1,479.92	1,705.71	2,148.31	2,563.49	376.55	324.24	280.18	250.29	-	3,316.59	**2,563.49**
C030			Contractors profit.		Add 25%		369.98	426.43	537.08	640.87	94.14	81.06	70.04	62.57	-		
M015					Total		1,849.90	2,132.14	2,685.39	3,204.36	470.69	405.30	350.22	312.87	-		
C031		24 inches dia.	64	Rft	100	Rft	1,664.91	1,918.93	2,416.85	2,883.92	423.62	364.77	315.20	281.58	-	3,731.16	**2,883.92**
C032			Contractors profit.		Add 25%		416.23	479.73	604.21	720.98	105.90	91.19	78.80	70.40	-		
M016					Total		2,081.14	2,398.66	3,021.07	3,604.91	529.52	455.96	394.00	351.98	-		
C033		27 inches dia.	48	Rft	100	Rft	2,219.88	2,558.57	3,222.47	3,845.23	564.83	486.36	420.27	375.44	-	4,974.88	**3,845.23**
C034			Contractors profit.		Add 25%		554.97	639.64	805.62	961.31	141.21	121.59	105.07	93.86	-		
M017					Total		2,774.85	3,198.21	4,028.09	4,806.54	706.03	607.95	525.33	469.30	-		
C035		30 and 33 inches dia.	40	Rft	100	Rft	2,663.85	3,070.28	3,866.96	4,614.28	677.79	583.63	504.32	450.53	-	5,969.86	**4,614.28**
C036			Contractors profit.		Add 25%		665.96	767.57	966.74	1,153.57	169.45	145.91	126.08	112.63	-		
M018					Total		3,329.82	3,837.85	4,833.71	5,767.85	847.24	729.54	630.40	563.16	-		
C037		36, 39, 42, 45 and 48 inches di	24	Rft	100	Rft	4,439.76	5,117.14	6,444.94	7,690.47	1,129.65	972.72	840.53	750.88	-	9,949.77	**7,690.47**
C038			Contractors profit.		Add 25%		1,109.94	1,279.28	1,611.24	1,922.62	282.41	243.18	210.13	187.72	-		
M019					Total		5,549.70	6,396.42	8,056.18	9,613.08	1,412.06	1,215.90	1,050.67	938.60	-		
C039	1	Petrol					938.44	1,103.05	1,426.65	1,733.23	283.06	250.48	223.37	204.93	-	2,299.34	**1,733.23**
C040	2	Diesel.					1,192.64	1,353.17	1,666.93	1,958.19	259.18	216.43	180.09	155.50	-		
					Total		2,131.08	2,456.23	3,093.57	3,691.42	542.23	466.91	403.46	360.42	-		
					Average Rate		1,065.54	1,228.11	1,546.79	1,845.71	271.12	233.45	201.73	180.21	-		

CARTAGE OF MATERIALS BY ANIMAL TRANSPORT

S.No.	Load in Miles	Number of Trip per 8 hours (N)	cost per Trip	Increase in Cost per Trip over Previous Mile.		Remarks.
			2,500			
1	1/2 Mile	6.22	401.93	-	1	Number of trips (N) per 8 hrs.
2	1 Mile	5.09	491.16	89.23		$N = \frac{8}{\frac{2L}{S} + }$
3	1-1/2 Miles	4.31	580.05	88.89		When L = lead in miles and
4	2 Miles.	3.73	670.24	90.19		S = Speed in mile per hour is alowed for loading and unloading and 1/2 hour per stacking at site Speed assessed is:
5	2-1/2 Miles	3.29	759.88	89.64	(a)	Loaded = 3 Mile per Hour.
6	3 Miles.	2.95	847.46	87.58	(b)	Empty = 4 Mile per Hour.
7	Average per 1/2 Mile above 3 Miles.	--	--	89.11	(c)	Average = 3.5 Mile per Hour Animal cart charges @ Rs. 2500/- per 8. Hrs. a day i/c loading and unloading & stackeing at site.

CONVERSION FACTORS

Code-136

CONVERSION FACTORS

To Convert	Into	Multiply
Length		
Inch	Milimetre	25.400-
Milimeter	Inch	0.03937
Foot	Metre	0.30480
Metre	Foot	3.28084
Yard	Metre	0.91440
Metre	Yard	1.09361
Mile	Kilometre	1.60934
Kilometre	Mile	0.62137
Mass. Weight		
Pound	Kilogram	0.45359237
Kilogram	Pound	2.20462
Ounce	Gram	28.3495
Gram	Ounce	0.03527
Quintal	Kilogram	100.000
Grain	Milligram	64.79890
Hundred Weight	Kilogram	50.8023
Tonne	Hundred Weight	19.6841
Tonne	Kilogram	1000.000
Ton	Kilogram	1016.0469
Ton	Pound	2240.000
Capacity. Volume Modulus of Section		
Pint (U.K)	Litre	0.568261
Gallon (Imperial)	Litre	4.54609
Cubic foot	Litre	28.3168
Cubic metre	Litre	1000.0
Litre	Cubic foot	0.0353147
Fluid ounce	Millilitre	28.413
Litre	Gallon (Imperial)	0.219969
Cubic inch	Cubic millimetre	16387.1
Cubic foot	Cubic metre	0.0283168
Cubic metre	Cubic foot	35.3147
Cubic yard	Cubic metre	0.764555
Cubic metre	Cubic yard	1.30795
Acre foot	Hectare metre	0.12334
Mass. Weight (Contd).		
Ton	Tonne	1.0160469
Tonne	Ton	0.9842065
Seer	Kilogram	0.9331
Maund	Kilogram	37.324
Tola	Gram	11.664